

ASSET MANAGEMENT ANNUAL STATEMENT 2024/25

EXECUTIVE SUMMARY

This year has been a remarkable journey for us at London St. Pancras Highspeed, filled with significant achievements and some challenges. As we wrap up the final year of Control Period 3 (CP3), we are proud to highlight the successes in enhancing our asset management practices, improving operational performance, and ensuring the safety and satisfaction of our passengers and workforce.

In January 2025, the ORR made its Final Determination for Periodic Review 24 (PR24). This recognised the significant improvements made by London St. Pancras Highspeed towards asset management best practice and the resulting improved management of long-term uncertainty. We are proud to continue demonstrating our commitment to asset management good practice, evidenced through the ISO55001 certification awarded to London St. Pancras Highspeed during 2024/25 and the expansion of the Network Rail (High Speed) (NR(HS)) certification to include the asset management of station and depot assets.

Our route operational performance has been exceptional; we achieved an average of 4.20 delay seconds per train. Delay minutes have reduced by 61% compared with 2023/24. This success is partly due to the Signalling and Telecommunications resilience plan and the Trespass Reduction Strategy. These initiatives were key components of the improvement plans requested by London St. Pancras Highspeed in 2023, in response to the increasing trend of points failures and trespass incidents. Our performance during the Paris Olympic and Paralympic Games was particularly good, and learnings from the operational changes introduced for the games have been incorporated into our business-as-usual procedures.

However, this year has not been without challenges. We have faced several isolated safety incidents from a range of causes. An increase in lost time injuries (including a road traffic accident involving three NR(HS) staff members where thankfully no serious injuries were incurred. NR(HS) staff were not at fault in the incident) has negatively impacted workforce safety performance. Assaults in our stations remain the leading cause of harm to staff, a trend seen across the rail industry. We continue to implement mitigation measures. We are also leading the development of an HSI system-wide workplace violence reduction strategy with NR(HS) and the British Transport Police (BTP).

Lift, escalator and travelator (LET) performance continues to be challenged by emerging asset faults and incidents in a similar trend to last year. Despite this, our assets achieved good availability over the year of 97.53%, just 0.47% short of our 98% target. To support our management of LET assets we have undertaken a benchmarking exercise with Transport for London which suggests the wider industry is being impacted by similar asset performance issues.

Passenger safety was better than the threshold until Period 8, but an escalator incident at Ebbsfleet in Period 9, in which four members of the public were injured, impacted the overall outcome. London St. Pancras Highspeed requested an improvement plan from NR(HS) which we have now received, and we believe this will have a positive impact on LET safety and performance going forward. We have received investigation reports into the Ebbsfleet escalator incident, which consider both the root cause and underlying factors. We have written to NR(HS) to raise concerns around the maturity of the management systems and controls in line with our

client role and safety assurance duties and to set expectations on NR(HS)'s levels of RM3 maturity which we will monitor through the joint assurance board.

In terms of renewals, we have delivered 19 of 29 route asset delivery milestones and nine of 10 station delivery milestones, including successful projects such as crossing renewals, bridge joint replacement and the Ashford Wells drainage. Additional works, above the baseline plan, were delivered where opportunities allowed or scope evolved. Milestones not fully achieved in 2024/25 have all been commenced and delivery prolonged into Control Period 4 (CP4) through the renewals change control process. Additionally, we have made significant progress in developing several projects ready for delivery in early CP4.

Finally, after two years of dedicated effort, we have successfully achieved a further business rate reduction. Backdated for the last two years, this results in a further £2m reduction in rates charges to operators in excess of the circa £25m reduction previously negotiated. The majority of the savings in business rates will flow back to the Train Operating Companies (TOCs) as most are a pass though cost.

We invite you to read through the details of our journey over the past year and explore the comprehensive efforts undertaken. We are pleased to have achieved excellent performance, whilst successfully delivering increasing volumes of asset renewals. Although we continue to face challenges from emerging safety trends such as staff assaults, we are confident that we have appropriate processes in place to identify and mitigate these.



Robert Sinclair Chief Executive Officer



Richard Thorp Chief Operations Officer



Joanne Parkes Head of Asset Management

KEY HIGHLIGHTS

Safety and Sustainability	Workplace Safety Initiatives: Despite a challenging year with an increase in the number and severity of assaults, London St. Pancras Highspeed is leading the development of a comprehensive workplace violence reduction strategy in collaboration with NR(HS) and BTP.		
	Accident Reduction: We've successfully reduced the number of RIDDOR incidents compared to 2023/24, with only two incidents caused by unavoidable road traffic accidents.		
	Public Safety: FWI MAA for NR(HS) managed areas of stations was 0.017, above the threshold of 0.015 as a result of a serious incident in P9 caused by an escalator failure at Ebbsfleet International.		
Operational Performance	Outstanding Route Performance: Achieving an average of 4.20 delay seconds per train, significantly better than our target of 7.60, and reducing delay minutes by 61% compared to the previous year.		
	Incident Management: Only five incidents had a performance impact of over 200 minutes.		
	Route Performance : The implementation of the Signalling and Telecommunications (S&T) resilience plan led to a 91% decrease in S&T delay minutes, and our Trespass Reduction Strategy reduced trespass-related delays by 47%.		
	Lift, escalator and travelator (LET) availability achieved 97.53% despite the impact of a small number of significant incidents. London St. Pancras Highspeed has requested an improvement plan which should have a positive impact on LET safety and performance.		
Asset Management	ISO55001 Certification : We were awarded the ISO55001 certificate for Asset Management good practice for our route and station assets.		
	New Asset Management System: We successfully introduced a new Enterprise Asset Management System for Mechanical and Electrical assets, with a phased rollout to all assets by August 2026.		
	Climate Adaptation : We completed an updated Adaptation Action Plan to address physical climate change risks.		
Renewals Plannina and	Milestone Achievements: We achieved 19 of the 29 route milestones, with several delivering greater volume than planned.		
Delivery	Station Renewals: We successfully completed 9 of the 10 station renewals milestones, with the majority being LET renewals.		
	Efficiency Gains: Efficiency reporting across CP3 renewal projects shows clear gains, with major schemes such as HPSS renewal and ITCS test benches completing significantly under budget. This reflects an increasingly mature renewals function with improved cost control and decision-making.		
Financial Reporting	O&M revenue Income in the first three years of CP3 was much lower than the CP3 budget due to the reduced First Working Timetables (FWTs) from both Eurostar (EIL) and Southeastern (SETL). The shortfall has been recovered through the volume reopener model. O&M revenue of £111.5m is £12.1m above the CP3 forecast as a result of higher recovery on EIL, SETL and freight in the last two years of the control period.		
	Business Rate Reduction: Following a long review and negotiation period we have successfully achieved a business rate reduction. Backdated 2 years, this results in a further £2m reduction in rates charges to operators in excess of the circa £25m reduction previously negotiated. The majority of business rates are pass through costs, so most of the savings will flow back to TOCs through reduced charges.		

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1 PURPOSE

The purpose of the AMAS is to provide assurance to the Office of Rail and Road (ORR) and the Secretary of State that HS1 Limited, trading as London St. Pancras Highspeed (London St. Pancras Highspeed), is fulfilling the Asset Stewardship obligations as defined in:

- Schedule 10, Section 6 of the Concession Agreement between London St. Pancras Highspeed and the Secretary of State for route; and
- Schedule 10, Sections 4.5 and 4.6 of the HS1 Lease between London St. Pancras Highspeed and the Secretary of State for stations.

We are committed to providing transparency and engagement with our customers on the efficiency and effectiveness of operations and maintenance expenditure and renewals funded from the escrow accounts. Therefore, while there are no specified reporting obligations for London St. Pancras Highspeed in the track or station access agreements between London St. Pancras Highspeed and the operators, this AMAS is shared with the Train Operating Companies (TOCs) and Freight Operating Companies (FOCs):

- Eurostar International Ltd (EIL);
- SE Trains Ltd (SETL);
- East Midlands Railway (EMR);
- DB Cargo;
- GB Railfreight; and
- Freightliner.

The key regulatory reporting dates for the AMAS are:

- London St. Pancras Highspeed submits the Draft AMAS to the ORR by 14 February 2025 (30 business days before year end); and
- London St. Pancras Highspeed submits the Final AMAS to the ORR by 5 June 2025 (45 business days after year end).

2 SAFETY AND SUSTAINABILITY

A challenging year with operational staff subject to an increase in the number and severity of assaults. 46% of all accidents are related to assaults. London St. Pancras Highspeed is leading the development of a system-wide workplace violence reduction strategy with NR(HS) and BTP.

We have reduced the number of RIDDOR incidents compared to 2023/24. Two of the four RIDDORs in the year were caused by a road traffic accident for which there were no clear mitigations.

Public FWI MAA for NR(HS)-managed areas of stations was 0.017, above the threshold of 0.015 as a result of a serious incident in P9 caused by an escalator failure at Ebbsfleet International.

Investigations related to the Ebbsfleet International escalator failure have been completed; London St. Pancras Highspeed will monitor the closeout of recommendations and will audit NR(HS) management of contractors in its 2025/26 RM3 audit.

2.1 Safety performance

We monitor a range of activity and outcome indicators to identify issues and challenge NR(HS) and other suppliers to make improvements. Outcome indicators include RIDDOR-reportable and lost time injuries for staff and contractors and accidents to passengers and members of the public. Activity indicators include RM3 improvement plan milestones and safety tours.

Our top-level safety metrics are:

- Workforce safety: FWI MAA per million hours worked; and
- Public safety: FWI MAA per 10 million footfall at stations.

2.1.1. Workforce safety

Figure 1 shows the workforce FWI per million hours worked for route and stations combined for 2023/24 and 2024/25.



Figure 1: Workforce safety - FWI per million hours worked

The FWI Moving Annual Average (MAA) was below the threshold during the first four periods of the year. However, it has remained above the threshold since P5, when a road traffic accident resulted in two RIDDORs. The workforce FWI MAA for 2024/25 was 0.080, exceeding the threshold of 0.054, as a result of the number of lost time injuries in the year.

When breaking out the workforce FWI metric for 2024/25, a distinction emerges between the workforce FWI for route (infrastructure) at 0.048 and stations (operations) at 0.118. In areas where NR(HS) has greater control over the environment, such as infrastructure maintenance and renewals, the threshold was successfully achieved, reflecting the effectiveness of safety management plans. However, operational station environments, where external factors are less controllable, did not meet the threshold, this includes injuries to station staff, temporary Customer Service Assistant (CSA) resource and Land Sheriffs. Figure 2 shows workforce accidents by category in 2024/25 compared with 2023/24.

Figure 2: Workforce accidents by category



Assaults (including both verbal and physical) have been the leading cause of workplace accidents and lost time injuries this year. 36 accidents (46% of total accidents) resulted from assaults, including six lost time injuries (compared with 28 and zero respectively for 2023/24).

NR(HS) staff have had conflict avoidance training, providing them with the skills to identify risks, de-escalate conflicts, and respond confidently to aggression. Wearing of body-worn cameras has been mandatory for station staff and cleaning contractors since the start of this year as a deterrent to violence and providing evidence for investigations; 68% of staff assaults have had a body-worn camera activated.

Despite these positive steps, the number of reported assaults has increased across our infrastructure, as it has nationally. While some of this could be attributed to better staff awareness leading to greater reporting, we are also aware that a 10% increase in passenger numbers this year and being a 24/7 station (unlike Kings Cross and Euston) are likely to have contributed to this increase. We have recognised the need to do more to combat the issue of staff assaults and this year London St. Pancras Highspeed has initiated and led the development of a System Workplace Violence Reduction Strategy with NR(HS) and the BTP; the strategy has been shared with the ORR. We have used data to identify current issues and blockers and develop strategic improvement themes particularly around the interfaces between different organisations involved:

- **Policy and guidelines:** to ensure clear and enforceable policy that defines workplace violence, sets response expectations, and standardises reporting.
- Enforcement and legal action: to strengthen legal measures, collaboration between NR(HS) and BTP and enforcement actions against offenders.
- Incident reporting and intelligence sharing: to improve incident data collection, intelligence sharing and real-time response coordination.
- **Training and learning:** to ensure all employees, security staff and managers are equipped with the skills to prevent, manage and recover from incidences of workplace violence.

• Innovation and technology: to leverage modern security technology and analytics to prevent and respond to workplace violence incidents effectively.

Underlying these themes is a series of actions which will be delivered over the course of the year through NR(HS) Safety Improvement Plans and the BTP Policing Plan. We will review the strategy and the impact of these actions on staff assaults quarterly to ensure efforts are directed towards the right initiative. Delivery of workplace violence reduction strategy milestones has been introduced as a KPI which we will report on at board level, this is similar to the approach previously used for the Trespass Reduction Strategy and milestones which have been effective in improving trespass performance.

The other most significant contributors to workforce accidents were contact injuries (17 accidents, 22% of total) and slips, trips and falls (12 accidents, 15% of total).

Contact injuries, which result from interactions with tools, equipment, or physical impact, have become an emerging area of concern, which will require more focused preventive measures; the only common factor observed is a lack of situational awareness, especially in low-risk environments such as stations, offices and stores. NR(HS) has delivered behavioural and situational awareness campaigns (as highlighted below), and worked on its assurance framework developing enhanced processes for its assurance inspection, site surveillance, engineering verifications, and engagement site visits. We will monitor the delivery of these assurance activities through the joint assurance board to ensure greater visibility of leadership driving the safety culture.

Slips, trips, and falls were one of the most significant contributors to workplace accidents in 2023/24 and NR(HS) has targeted safety improvements in this area this year. A range of mitigation measures were introduced, including enhanced inspections of tools and equipment to ensure alignment with safety standards, safety footwear sizing programmes conducted by specialist suppliers, and behaviour-focused communication campaigns designed to promote a proactive culture of safety and situational awareness throughout the workforce. This led to a reduction in the number of slip/trip/fall accidents for NR(HS) staff compared with 2023/24. We will monitor how NR(HS) addresses these issues within NR(HS) and their supply chain's Safety Improvement Plans and will use this to inform our areas of focus for site assurance.

There were 78 accidents to the NR(HS) workforce and contractors, compared to 59 in 2023/24. Despite the increase in accidents and lost time injuries there was a reduction in RIDDOR-reportable accidents with four reported (including two as a result of a road traffic collision in P5 caused by dangerous driving of a third party), compared with five in 2023/24. There were no RIDDOR Specified Injuries. The RIDDOR lost time injuries are summarised below:

- A works van, travelling from Singlewell depot to site, was struck by a car while stationary at traffic lights on the A2. Three injured parties sustained neck and back injuries, attended the hospital for treatment, and two of them required an extended absence from work to support their recovery. Regular welfare checks have been conducted to monitor their recovery. This incident accounts for two of the RIDDORs (105 days lost time and 50 days lost time). NR(HS) investigations highlighted that there were no clear mitigations that would have prevented this accident, concluding that the accident was caused by dangerous driving by a third party. NR(HS) has reviewed its driving for work policy, conducted a toolbox talk on road safety and republished the Drivers' Handbook following a national Drive Safe campaign.
- An Overhead Catenary System (OCS) technician tripped in the gully of London Tunnel 1 while undertaking height and stagger measurements. They reported a swollen ankle and difficulty

walking. They were escorted back to the work vehicle and an ice pack applied to their ankle. They were carrying the height and stagger gauge at the time of the accident, but this did not impede their view of the walkway. Their safety boots were in good condition with good tread. (12 days lost time). A range of measures have been introduced through the safety improvement plans in response to slips, trips, and falls including: behavioural safety campaigns, a safety footwear sizing programme by specialist PPE suppliers, and a review of review of tool and equipment inspections to ensure alignment with safety standards.

• A Customer Service Assistant (CSA) strained his back while providing mobility assistance for a passenger with two suitcases. (Initially 14 days lost time). NR(HS) has developed best practice guidance for manual handing tasks, and is developing a business case for new trolleys to assist with certain manual handling tasks to reduce risk.

NR(HS) has conducted safety investigations for all reported incidents, including non-lost time accidents. These incidents have encompassed a wide range of categories including assaults by members of the public on staff in station environments, slip, trip, and fall events, contact injuries, and road traffic accidents. Each incident was carefully examined to identify root causes, mitigate risks, and enhance overall safety measures with targeted actions developed to mitigate risk and enhance overall safety.

NR(HS) held its second annual safety stand-down in November. This event provided an opportunity for the NR(HS) maintenance and project teams to come together to reflect on personal experiences of workplace incidents and injuries, as well as providing advice and support on a range of health and safety topics.

A total of 37 accidents (47% of the total) were reported by NR(HS) suppliers; this is a similar number to last year (36). NR(HS) continues to work with its contractors to drive improvements, for instance enhanced training programmes, structured assurance site visits, and detailed method statement reviews have been implemented to ensure consistent safety standards throughout the workforce. NR(HS) also continues its supplier safety days to share learning and best practice. In the year ahead London St. Pancras Highspeed's assurance will have a focus on NR(HS) management of contractors as detailed in Section 2.2.

At **Ashford International** station there were no accidents recorded for the ABM workforce or contractors during 2024/25.

UKPNS workforce

The UKPNS team working on HS1 had no lost time incidents or medical treatment injuries. This continues the team's excellent safety record, with no lost time incidents for over 13 years.

UKPNS has introduced Think Feel Act, a new safety programme which has been rolled out to all UKPNS employees. Every employee is required to attend a mandatory half-day in-person introductory session and participate in the weekly safety nudges. UKPNS hosted several site meetings with London St. Pancras High Speed during the year and worked closely with NR(HS) to share safety best practice for the benefit of the overall railway.

2.1.2. Public safety

Figure 3 shows the FWI MAA for passengers and members of the public for St. Pancras International, Stratford International and Ebbsfleet International.

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Figure 3: Public safety - FWI per 10 million footfall at stations

Passenger FWI for 2024/25 was 0.017 for NR(HS)-managed areas of the stations, above the threshold of 0.015 as a result of a RIDDOR-reportable escalator incident at Ebbsfleet International in P9, in which four members of the public sustained injuries. Up until P9, the measure was beneath the threshold and showing an improvement over 2023/24 and the full year FWI was beneath the previous year's threshold.

In P9, there was a serious incident caused by an escalator failure at Ebbsfleet International. Escalator 02, running in the up direction, spontaneously failed whilst under load, with the escalator steps running backwards in the down direction. Approximately 25 members of the public were on the escalator at the time, and four reported injuries. Two were taken to hospital, one for treatment to a knee injury, and one for treatment for grazes and bruising. One of these was reported as a RIDDOR incident.

Following the failure, the escalator was isolated and welfare checks were carried out by NR(HS) on staff who responded to the incident. The lift and escalator maintenance contractor employed by NR(HS) (Schindler) investigated to determine the failure mode and root cause, NR(HS) also instructed an independent specialist to investigate and validate Schindler's findings. The findings of these investigations aligned and highlighted that the asset had been inadequately maintained. Following these investigations, all other escalator assets were checked and it was confirmed that the same failure mode was not present on any other asset.

Having reviewed these reports, we wrote to NR(HS) requesting a performance improvement plan from NR(HS) and Schindler. This plan consisted of a full annual maintenance inspection of all assets to verify asset condition and a systematic plan to address identified vulnerabilities from the inspections. The plan covers nine core areas including strategic changes in management team, alignment with industry best practice, providing clarity amongst key stakeholders on condition expectation, more tactical improvements to maintenance frequencies, fault response and reporting, and spares management. The areas covered appear appropriate and progress of the improvement plan is monitored weekly via a stakeholder dashboard seen by NR(HS) and London St. Pancras Highspeed Directors/Exec teams. NRIL also investigated the incident looking at the underlying systemic factors which contributed to the failure. In addition to supporting the findings of the previous investigations, the NRIL investigation and found shortcomings in contractor management and assurance oversight from NR(HS), and a lack of escalation from British Engineering Services (BES) who conduct insurance inspections on our behalf. We wrote to NR(HS) again to raise concerns about its contractor management, data quality assurance and organisational structure supporting stations. We used the ORR's Risk Management Maturity Model (RM3) to set clear expectations regarding the maturity of NR(HS) management systems and controls in these areas, in line with our safety assurance responsibilities. We will monitor the close out of recommendations from the investigations and NR(HS)'s plans to improve maturity in these areas through our independently chaired joint assurance board. We are also reviewing the scope of services of BES and improvements which need to be made to our assurance of BES and stations assets. We are currently reviewing the set of asset condition measures which we monitor across our railway assets and will extend this to include safety critical stations assets to provide visibility of critical condition measures.

Slips, trips, and falls remain the primary causes of passenger injuries. The stations' locally owned safety plans focus on reducing passenger FWI, including specific escalator entrapment and seasonal safety campaigns as well as a focus on improving the management of platform slip resistance and platform train interface risk assessment. We are also looking into potential Al solutions for escalator safety.

At **Ashford International** station there were no accidents recorded for members of the public during 2024/25.

2.2 Health, safety and assurance

The London St. Pancras Highspeed Health, Safety and Assurance (HSA) strategy has three core components: risk bowties, assurance, and RM3.

Throughout 2024/25, London St. Pancras Highspeed has engaged with RAIB on its investigation into the multi-purpose vehicle (MPV) collision in 2023/24, which caused an injury to the driver of a tamper on HS1 infrastructure. RAIB identified a recommendation applicable to London St. Pancras Highspeed: *"review the findings from this investigation to establish if it can make improvements to the strategic assurance of its suppliers"*.

In response to this recommendation, London St. Pancras Highspeed has undertaken an internal review of its strategic assurance of the supply chain and sought external advice on London St. Pancras Highspeed's responsibilities and how it discharges these. These reviews have been subject to London St. Pancras Highspeed internal governance and the London St. Pancras Highspeed Board Safety Committee.

The review identified two improvements to our assurance framework which we have implemented:

• **Bowties:** Introducing a change control process for risk bowtie control effectiveness. This will allow greater auditability and retention of corporate knowledge within the business and greater assurance on the closure of specific assurance actions and improvements in control effectiveness.

• Assurance: Improvements in the processes between London St. Pancras Highspeed and NR(HS) to accept and close London St. Pancras Highspeed audit recommendations. This will ensure that recommendations from London St. Pancras Highspeed audits are clear, accepted into the NR(HS) recommendations process, or rejected with suitable justification.

London St. Pancras Highspeed has consulted with and written to the ORR outlining its approach to closing this action within the timescales set by the ORR and it was confirmed that no further information was required at this time.

We have also monitored the improvements made by NR(HS) following the three recommendations which they received from the RAIB investigation and will continue to seek assurance through our joint assurance board and through the introduction of a new KPI concerning overdue engineering and safety actions which will be reported on at board level.

The findings from this report and review, along with other significant incidents, will also influence our ongoing assurance plans through: KPIs, site assurance activities, the London St. Pancras Highspeed Audit Plan and the activities of the independently chaired Joint London St. Pancras Highspeed/NR(HS) Assurance Board.

As part of developing our assurance plan for 2025/26 we have reviewed our current context and environment. Considering progress and learning in CP3, and the risks identified within CP4, we have developed five key themes on which our assurance of CP4 will be focused as set out in Figure 4.

Figure 4: Strategic themes for CP4 assurance

System Risk/ Safety Case	 We have seen significant system risks manifest at the interfaces within the system (i.e. Stranded Trains, Workplace Violence). Our role will be to identify these risk and provide leadership in bringing the system together to respond and mitigate them appropriately.
Security	 Ensuring robust measures are in place to mitigate threats such as trespass, assaults, theft, and terrorism. This is vital due to the high-profile nature of the HS1 infrastructure, and to deliver an environment which feels safe and is safe.
Asset Lifecycle Safety/ Safety by Design	 CP4 brings with it a step change in renewals activity and change to support growth. Asset safety throughout their lifecycle will be a key focus, as underlined by the ORRs focus during PR24 on safety by design.
Leadership (inc. Contractors, Workforce and TOCs)	• Ensuring that we and our key suppliers have effective processes to monitor, supervise and control the activities of their supply chain will be critical to ensuring the safety of our workforce, assets and passengers.
Best Practice and External Engagement	 We are embarking on renewals and enhancement works which have not been delivered before on our infrastructure, and emerging risks. We will adopt an outward facing approach to ensure that we/our supply chain are identifying and learning from incidents and best practice.

These strategic assurance themes have been used to develop a draft five-year safety and security audit plan. This will be reviewed annually to ensure that it is prioritised to address key areas of risk and assurance required by London St. Pancras Highspeed and will be discussed with our key strategic suppliers to ensure alignment with their internal audit plans.

We will also use these strategic themes to drive the agenda and conduct horizon scanning as part of the joint assurance board. We intend to develop the joint assurance board which currently consists of London St. Pancras Highspeed and NR(HS), to bring in more of our key suppliers and stakeholders from the system to better achieve the aims of the assurance board in identifying system level strategic risks and bringing the system together to mitigate them.

RM3: In 2024/25 we have focused on the following key spokes related to London St. Pancras Highspeed's role in the system to drive maturity in London St. Pancras Highspeed's HSA Strategy and within the supply chain:

- RCS4: Control of contractors:
 - o Review of Project H&S Procedure, H&S Employers Requirements, Contractor management procedures and CDM Handbook.
 - o Introduction of a periodic forum to assure London St. Pancras Highspeed that it is fulfilling its duties and requirements against these documents and legislation.
 - o Introduction of a quarterly forum to review site assurance inspection findings and inform focus areas for site visits.
- MRA1: Proactive monitoring arrangements:
 - o Working with the relevant London St. Pancras Highspeed Heads of Discipline, we have rationalised our risk bowties to better reflect London St. Pancras Highspeed's role of strategic assurance of the supply chain which has allowed for greater collaborative discussion on risk and control effectiveness.
 - o We have aligned our assurance plan reviews to feed into our wider risk management process.
- OC7: Record Keeping, Document Control & Knowledge Management
 - o As described above, we have implemented a change control process for risk bowtie effectiveness to provide a corporate memory regarding incidents, assurance actions and control effectiveness.
 - We have developed a quarterly forum to share lessons learned regarding site assurance/site safety, and to look at lessons or best practice from outside the HS1 system.
 - We have developed an external engagement plan to ensure that London St. Pancras Highspeed is aware of developments and best practice within the industry and targets specific risk areas for learning and best practice to improve risk control.
- SP1: Leadership:
 - We have reviewed and updated our Health, Safety & Assurance Policy to reflect London St. Pancras Highspeed's role in the system as providing safety leadership and provided clearer detail on who is responsible for this and the arrangements for how this is delivered.
 - o Internally we have introduced a new quarterly forum to aid consultation with employees on Health & Safety matters and appointed new Safety Reps.

In addition to the key spokes previously identified to support us in delivering our asset stewardship role we propose to add OC5 System Safety & Interface Arrangements and OC7 Record Keeping, Document Control & Knowledge Management (note that work on OC7 commenced in 2024/25). These additional spokes are relevant to all the above key themes. The aim will be for all core spokes to reach or remain at level 4 (predictable) by the end of CP4 and push towards level 5 (excellence).

NR(HS) continues to integrate RM3 into its assurance processes. Improvement areas will be identified and will be addressed in the Safety Strategy Improvement Plan. London St. Pancras Highspeed conducts RM3 audits on NR(HS), the outputs of which will also feed into NR(HS)'s safety plan and strategy. Following the Ebbsfleet escalator failure we used the RM3 framework to set our expectations of NR(HS)'s improvement in areas of their management systems aligned with specific spokes.

London St. Pancras Highspeed maintains a good relationship with the ORR Lead Inspector for the HS1 network. The organisations meet quarterly to discuss safety performance and assurance plans.

2.3 Sustainability

We continue to make good progress implementing the London St. Pancras Highspeed Sustainability Strategy. Highlights for 2024/25 include:

- Replacement of over 250 fluorescent and high-intensity discharge lights with 70% more energy-efficient LED alternatives at Corsica Street and West London Portal head houses. These upgrades will reduce operation and maintenance costs and are part of the HS1 system's suite of energy-saving initiatives.
- We have continued to work with NR(HS) to implement station energy saving schemes including Building Management System (BMS) optimisation and control upgrades. We have submitted our Energy Savings Opportunity Scheme (ESOS) Phase 3 report which will help direct energy efficiency scheme funding in CP4 for both route and stations.
- In the 2024 survey season (April October), Ecus Environmental Consultants re-established our biodiversity baseline using best practice UKHAB ecological surveys in key habitat areas between St. Pancras and Folkestone (see below).
- The Bumblebee Conservation Trust was commissioned to develop a management plan for a site adjacent to the Singlewell Depot, aiming to elevate it to the 'Good' Defra category over the next five years. The proposed 1.45-hectare hotspot could become an ideal connecting habitat for the surrounding shrill carder bee populations, one of the UK's rarest bumblebee species. Staff were also given the opportunity to visit the site and receive training on bee identification to contribute to the national monitoring scheme.
- London St. Pancras Highspeed joined NR(HS) in becoming sponsors of the Rail Safe Friendly initiative by Learn Live, educating schoolchildren on rail safety with Network Rail's Switched On Rail Safety content. With silver membership, London St. Pancras Highspeed has enabled the delivery of educational content to 90 schools across our route.
- London St. Pancras Highspeed team members helped pilot the Design Engineer Construct (DEC) 'Railway Challenge' at King Ecgbert School in Sheffield. DEC, by Class Of Your Own, equips students with skills for careers in the built environment. The London St. Pancras Highspeed team provided feedback and showcased industry jobs. The programme aims for a global rollout and welcomes London St. Pancras Highspeed's future support.
- Several more NR(HS) team members completed Mental Health First Aid training, joining the growing list of over 50 Mental Health First Aiders across the HS1 system.

 In early 2025, London St. Pancras Highspeed worked with a specialist consultant to undertake a comprehensive climate Transition Risk Assessment and develop a Climate Change Adaptation Action Plan. The Transition Risk Assessment evaluates London St. Pancras Highspeed's material risks and opportunities associated with the transition to a low carbon economy. The Adaptation Action Plan, informed by an existing physical Climate Change Risk Assessment (CCRA) completed in 2022, identifies priority adaptation actions to increase infrastructure resilience. Both initiatives will inform our future business planning. The Adaptation Action Plan did not identify any significant physical risks in the short term but a number of asset-specific technical studies will be completed over the short and medium term to help us better understand future risk and potential mitigations. These actions will be recorded in the Specific Asset Strategies when next updated.

We publish a comprehensive ESG report on the London St. Pancras Highspeed website in June each year setting out our performance to date and our priorities and plans for the future.

Biodiversity re-baseline

The HS1 route's lineside vegetation is a vital asset, providing wildlife corridors for surrounding areas. As part of our commitment to continual biodiversity enhancement, we sustainably manage land for safety, the environment, and our neighbours.

This year, Ecus Environmental Consultants have been engaged to re-baseline London St. Pancras Highspeed's biodiversity position. During the 2024 survey season (April – October), Ecus established a biodiversity baseline through best practice UKHAB ecological surveys and calculations.

Ecus have also developed a management handbook which recommends management techniques to improve the quality of each parcel of land over the next five years. London St. Pancras Highspeed and NR(HS) aim to achieve a Biodiversity Net Gain target of 20% by 2030 within London St. Pancras Highspeed landholdings.

3 OPERATIONAL PERFORMANCE

Route performance was very strong with an average of 4.20 delay seconds per train against a target of 7.60. Delay minutes were reduced by 61% compared with 2023/24.

There were only five incidents with a performance impact of over 200 minutes.

Implementation of the Signalling and Telecommunications (S&T) resilience plan has led to a 91% decrease in S&T delay minutes and the Trespass Reduction Strategy has helped to reduce trespass-related delay by 47%.

Recommendations from the investigations into the Thames Tunnel flooding in December 2023 have been addressed. Additional pumping has been installed along with monitoring equipment to detect flow rates and water levels. A multidisciplinary review of system capabilities with costed options and design specifications for upgrades to meet existing and future demands will commence early in CP4.

Lift, escalator and travelator (LET) availability achieved 97.53% despite the impact of a small number of significant incidents. London St. Pancras Highspeed has requested an improvement plan which should have a positive impact on LET safety and performance.

3.1 Route performance

Performance was excellent in 2024/25 with total delay minutes and delay seconds per train both significantly better than target. Delay minutes were 30% less than the best annual performance in the previous 10 years.

The primary service requirement for London St. Pancras Highspeed is average seconds delay per train for all incidents attributed to London St. Pancras Highspeed; this is shown in Figure 5. In 2024/25 we achieved an average of 4.20 delay seconds per train against a target of 7.60 and a total of 4,682 delay minutes against a target of 7,829; this is a 61% reduction in delay minutes compared with 2023/24. In addition, there were 196 delay free days; while this was slightly less than the target of 200, it was an 11% improvement over 2023/24. This significant improvement in performance was in the context of the highest train volumes since the Covid-19 pandemic.

Figure 5: Seconds delay per train



We also report against a Significant Delays KPI, which includes all incidents with a performance impact of over 200 minutes. There were only five such incidents, as shown in Table 1, compared with 13 in 2023/24.

Table	1:	Significant	delays
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Period	Date	Delay minutes	Reason
3	20/06/2024	249	Points failure
5	26/07/2024	522	External power supply (UKPNS)
7	15/09/2024	719	Trespass
11	14/01/2025	278	Trespass
12	06/02/2025	371	External power supply (UKPNS)

3.1.1. Performance Improvement Plans

While the June and December 2024 Timetable Changes on Southeastern had a positive impact, improved performance is largely due to the introduction and embedding of four Performance Improvement Plans (PIPs) to tackle the largest and most frequently attributed delay causes.

As in 2022/23, the two highest causes of delay in 2023/24 were points failures and trespass. As reported in our 2023/24 AMAS:

• We requested NR(HS) develop an asset resilience plan for S&T to address performance impacting issues associated with points failures, including both tactical and strategic actions. Following the points failures in Q1 2023/24, NR(HS) re-evaluated the plan, building upon and accelerating actions.

• NR(HS) introduced an updated trespass mitigation strategy to reduce the number of trespass events and their operational impacts, building on the previous trespass strategy.

Implementation of these plans has resulted in significant improvement in 2024/25. The S&T Resilience Plan, which involves a range of measures including carrying out daily points swings during overnight engineering hours, has led to a 91% decrease in delay minutes compared with the previous year. The Trespass Reduction Strategy, overseen by a dedicated Project Manager and containing several mitigations including increased camera coverage at known hotspots, has helped to reduce trespass-related delay by 47%. The strategy will continue to evolve to support further reduction in the ocurence of trespass.

Further PIPs have been introduced for the most common causes of delay, Z Code (unexplained delay) and O Code (signalling delay). Trackers have been developed and trend analysis has helped target specific issues such as hotspot locations, to provide feedback via the periodic Joint Highspeed Performance Working Group with Southeastern and NRIL Kent Route.

Updates to the PIPs are discussed via an internal periodic Train Performance Steering Group (TPSG). In addition, NR(HS) has introduced a Daily Delays Conference for the Performance and Operations Teams.

3.1.2. Performance Incident Review Process

In 2024/25, the NR(HS) Performance Team completed a major overhaul of its Incident Learning Review (ILR) process, to create a method to more effectively review major incidents on HS1 and to ensure that meaningful learning is effectively implemented into business-as-usual working practices. The updated NR(HS) Performance Incident Review Process was published in August 2024 and sets out the required four stage process following a major incident on the network:

- A Fast Facts Investigation for incidents over 100 delay minutes;
- A Significant Performance Incident Review (SPIR) for incidents over 200 delay minutes;
- An After-Action Review (AAR, 28 days after SPIR actions confirmed); and
- Testing, after six months, typically in the form of a written report.

This updated process was used following the Stratford International trespass incident in P7, the largest delay incident of the year. The SPIR (with key stakeholders including Eurostar, Southeastern and BTP) highlighted learning around the themes of improving security briefings with lineside neighbours and addressing gaps in CCTV camera coverage to mitigate future trespass risks on the network. The 28-day AAR identified that all seven actions assigned during the SPIR had been completed. Evidence of learning from the Performance Incident Review Process was demonstrated in P8 where the efficient response to a trespass at St. Pancras International station helped to reduce the delay associated with this incident to 88 minutes.

The next stage of development will be to feed themes identified during the Performance Incident Review Process into collaborative exercises with participation from stakeholders across the HS1 system, allowing NR(HS) to test the extent to which lessons learned are being embedded into both future incident response and business-as-usual working arrangements.

3.1.3. Other improvements

Olympic and Paralympic Games

In preparation for the Olympic and Paralympic Games in Paris, readiness plans were developed which established enhanced response arrangements for incidents and re-prioritised works. Performance during this period was so successful that business-as-usual procedures have been updated to incorporate those aspects which worked well. Examples include the retention of certain forums (e.g. bi-weekly meetings between TCS and Operations), amending specific incident response procedures and on-call arrangements (by including the MOMs in incident calls and enacting six-hour shift splits during on-call for certain disciplines) and repeating the implementation of a command structure for specific events, including the decision to implement Command and Control over the 2024 Christmas period.

Stranded trains protocol

In the 2023/24 AMAS, we reported on dewirements on HS1 and on other networks at the interface with HS1, noting that we were working as a system to learn from and improve our joint response to reduce disruption to passengers and safety risk. We established a steering group to lead the work on managing stranded trains, chaired by London St. Pancras Highspeed and with the participation of NR(HS), Eurostar, Southeastern and Eurotunnel.

In June 2024, the ORR raised concerns regarding the health, safety and welfare of passengers and the overall passenger experience during stranded train incidents across the UK railway infrastructure. London St. Pancras Highspeed, NR(HS), Eurotunnel, Eurostar and Southeastern provided a joint response to the ORR in July 2024 which included the Stranded Trains Protocol, jointly developed by these organisations and others. The protocol was developed, aligned and reviewed against the RDG Guidance for Stranded Trains Management and further RSSB guidance on management of Stranded Trains.

The protocol provides practical, operational and tactical guidance to staff of EIL, SETL, NR(HS), Network Rail Kent and any other operators, where they interface with the HS1 network and Eurotunnel to meet the needs of passengers who are stranded on board trains. The top strategic objective of the protocol is to minimise the risks to passengers on the train. The protocol has been tested through simulation exercises covering tabletop and desktop exercises and real-life scenarios.

The Steering Group continues to meet and assure system readiness to respond to a stranded passenger event. A live exercise has been completed with Eurostar, which included evacuating passengers at Stratford, and a live exercise on the Eurotunnel interface is planned for August 2025.

Thames Tunnel Kent Portal

Following the Thames Tunnel flooding incident in December 2023 (reported in the 2023/24 AMAS) and the subsequent investigations, additional pumping capacity has been installed along with monitoring equipment to detect flow rates and water levels, alarm systems have been supplemented and NR(HS) processes for managing alarms have been revised. A specialist contractor has been appointed to undertake a multidisciplinary review of existing system

capabilities and to deliver costed options and design specifications for system upgrades to meet existing and future demands. The contract will commence in early CP4 and will include technical assessment of local hydrology and climate change resilience, the operation and effectiveness of the existing Swanscombe Marsh drainage systems, the performance of the Swanscombe pump station, and the capability of the Thames Tunnel pumping systems to manage changes in inflow resiliently. Further details are provided in Appendix A2.

Seasonal planning

There has been a significant focus on seasonal planning in 2024/25, especially given the Thames Tunnel flooding incident in the previous year. The Weather 365 Document, which sets out the processes and tasks that NR(HS) should undertake in preparation for the impact of seasonal weather, was updated in 2023/24. NR(HS) has since created guidance plans for Summer, Autumn and Winter to ensure readiness for seasonal adverse weather.

3.1.4. UKPNS asset performance

UKPNS assets continued to perform well with availability of 99.9903% in the year, exceeding the target of 99.9885%. There were two interruptions of power supply during the year, occurring on 26 July 2024 (P5) and 6 February 2025 (P12).

The incident on 26 July 2024 was caused by a damaged bus bar insulator at St. Pancras; the root cause of the failure was bird activity. The protection system operated correctly and the sequence of events was accurately captured on the UKPNS SCADA system. This incident caused a 20-minute power interruption to HS1, resulting in 522 delay minutes. UKPNS is collaborating with a specialist to look at additional mitigation measures to minimise future incidents of this type.

The second incident on 6 February 2025 occurred while a contractor was working on the 400kV bushing monitoring system. Barking SGT tripped bringing trains to a halt. This incident caused a 31-minute power interruption to HS1, resulting in 371 delay minutes. An internal investigation concluded that the immediate cause was the contractor operative disconnecting the wiring from the relay terminals. The root cause was the failure to follow process and procedure. UKPNS will implement 12 recommendations to ensure that the incident is not repeated. The subcontractor submitted a corrective action plan to UKPNS; the 18 actions in this plan will be tracked at the three-monthly commercial meetings.

3.2 Stations performance

Stations performance is reported against a number of KPIs. The key measures of station performance are the availability of lifts, escalators, and travelators (LETs) and cleaning audit scores, both of which are reported below.

Figure 6 shows availability of passenger LETs for the three stations managed by NR(HS).



Figure 6: Availability of lifts, escalators and travelators

Performance has been variable through the year, affected by a number of incidents. The most significant were:

- P1: An asset failure on an escalator at Ebbsfleet International which was resolved by the maintainer.
- P1–P3: Lift 2.1, a critical asset for the planned introduction of the EES system, was proving unreliable and an increasing number of component failures were resulting in extended periods of downtime. The planned renewal of this lift was therefore accelerated by four months (swapped with the renewal of Lift 2.2). The lift was taken out of service for renewal in P4 and returned to service in P8.
- P6: An object became lodged in the comb plate at the top of Escalator 2.1.2 at St. Pancras International, resulting in damage to the steps. All 70 steps had to be replaced, more than are held as critical spares.
- P6: Handrail failure on a travelator.
- P8-P9: Failure of a travelator, which required complex work to the handrail and pallet drive systems. To address issues identified with escalator and travelator handrails, we have worked with the manufacturer to define an improved handrail specification.
- P9: Serious failure of Escalator 02 whilst under passenger load at Ebbsfleet International. This incident and subsequent investigations and actions are discussed in Section 2.1.2. The asset was removed from the performance regime in P11 as it will be renewed (the planned renewal is being brought forward) rather than repaired owing to the damage caused. The asset is forecast to be back in service in July 2025. Parts will be flown over rather than shipped to expedite this process.
- P9: At Stratford International, a coat was drawn into an escalator resulting in damage to the headshaft. The asset was returned to service in P10.
- P12: A number of small faults on travelators which were all rectified quickly.

As set out in Section 2.1.2, following the Ebbsfleet escalator incident in P9, we requested a performance improvement plan for lifts and escalators from NR(HS). NR(HS) has engaged with Schindler to understand quality and delivery issues and has put in place the following steps which we believe will have a positive impact on reliability.

- Maintenance cards must be completed for each asset during the planned monthly, 3 monthly, 6 monthly and 12 monthly PPM visits;
- Evidence of completion must be uploaded into the NR(HS) Concept system:
- NR(HS) will undertake unannounced post-maintenance inspections to ensure that the maintenance has been completed to the agreed standard set out on the maintenance card and that the area has been left in a clean condition;
- NR(HS) will use reliability data from the asset database to focus on repeat issues and work with the incumbent supplier to understand root causes and ensure action is taken to avoid repeat failures; and
- Post refurbishment handback, an independent inspection will be carried out which will include electrical terminations, security of switches, door adjustment, handrail alignment, cleanliness of plant rooms and controls equipment pits etc.

We are also improving the use of data for LET asset management decisions. Renewed LET assets are fitted with 'black boxes' recording component performance data. The black box data is downloaded daily (not a live system) and allows further interrogation of historic component performance and trend identification. This data will allow us to improve asset performance through data driven planned maintenance activities and monitoring of strategic spares.

NR(HS) is undertaking a tender exercise for maintenance and refurbishment of lifts, escalators, and travelators for five years from Summer 2026.

NR(HS) is bolstering the engineering resource within its Asset Management and Facilities Management Teams to oversee and drive performance of the assets, and of the supplier contracted to deliver planned and reactive maintenance of the assets.

We have also undertaken a benchmarking exercise with Transport for London (TfL) this year which suggests the wider industry is being impacted by similar LET asset performance issues. We will continue to discuss LET asset issues with TfL to identify any trends in component failures, or opportunities for maintenance and renewal best practice to be shared and acted upon.

Figure 7 shows station cleaning audit scores for the three stations managed by NR(HS).



Figure 7: Station cleaning audit scores

The overall cleaning audit score is close to target with Ebbsfleet International above target and St. Pancras International and Stratford International below target.

The cleaning contract was set during Covid, when passenger volumes were much lower and a cost efficiency could be realised. The scores are showing that the contract scope is not sufficient for current passenger volumes and an increase in cleaning staff, and hence contract cost, is required to achieve the quality required by London St. Pancras Highspeed and the TOCs. We have worked with the cleaning contractor on improvement plans, including the introduction of additional resource at St. Pancras International and Stratford International. The costs for this additional resource have been presented to the TOCs and now form part of the 2025/2026 Best Estimate for Qualifying Expenditure (Qx).

Ashford International

EIL has not operated international train services from Ashford International since March 2020. The international station remains open, providing access for pedestrians to domestic train services and car parks within and adjacent to the international station. We will continue to maintain the international areas of the stations in a cost-efficient manner, ensuring station asset condition and performance is maintained at sufficient levels to ensure a smooth recommencement of services when needed.

All cleaning KPIs at Ashford International were 100% throughout the year. There is currently just one customer-facing LET asset (the concourse lift); availability was 100%.

4 ASSET MANAGEMENT

ISO55001 certificate for Asset Management good practice awarded to London St. Pancras Highspeed for route and station assets.

New Enterprise Asset Management System has been successfully introduced for Mechanical and Electrical assets in March 2025, phased roll out to all assets by August 2026.

Updated Adaptation Action Plan for physical climate change risks has been completed.

4.1 Asset capability and condition

Asset capability has remained constant since commissioning with no projected reductions within our concession period. The maximum line speed remains the highest in the UK at 300km/h and the route availability meets all passenger and freight customer needs at up to 22.5 tonnes (axle loading). The maximum number of achievable train paths that the signalling system can deliver remains at 20 international trains per hour in each direction.

Asset condition information is key to informing decisions for the effective operation, maintenance, and renewal of the HS1 infrastructure.

4.1.1. Route asset condition

Figure 8 shows the current asset condition scores within the NR(HS) Electronic Asset Management System (EAMS) by discipline, compared to the condition at the end of CP2 (2019/20) as reported in the PR19 5YAMS.

As reported in the 2023/24 AMAS, a high percentage of assets with a condition score of 4 or 5 are telecoms assets. This is primarily due to obsolescence in these asset groups, which is being mitigated through the use of spares and by replacing assets through the renewals programme. The large increase in telecoms assets with condition score 1 is primarily due to the DTN renewals project completed in CP3.

Track has seen asset deterioration over CP3 leading to an increase in condition 3 assets. This is expected and the planned renewals in CP4, such as the high output ballast campaign, combined with the continued grinding and tamping programme, will improve the overall condition of this asset group.



Figure 8: Route asset condition by discipline

4.1.2. Stations asset condition

Figure 9 shows the current station asset condition scores by discipline, these take the condition information held in the Concept facilities management system, moderated by London St. Pancras Highspeed and NR(HS) to reflect the current condition. This condition information was used to develop the maintenance and renewals plans detailed in the PR24 5YAMS.

Station assets are generally performing well overall and meeting their expected condition, although specific LET assets have experienced performance issues due to difficulties obtaining parts from the original manufacturer. We continue to manage minor leak issues on the transition roof at St. Pancras International, until delivery of significant renewal work to address this in CP4.



Figure 9: Station asset condition by discipline

External consultants undertake a survey of all HS1 station assets every five years. These surveys were completed in 2024/25. The asset condition scores are now being verified with the asset maintainers. The survey reports, including condition scores, will be shared with the ORR once the validation exercise has been completed in Summer 2025.

4.2 Obsolescence

Obsolescence is one of the key asset management challenges and drivers for renewal activity. It is highly correlated to the inability to restore an asset to service or increased repair time, leading inevitably to reduced and compromised availability and potential service disruption. This risk is principally managed via regular dialogue with, and contractual obligations of, key suppliers.

The NR(HS) Strategic Asset Management Plan (SAMP) and supporting SASs set out four states of obsolescence for an asset or a system:

- Manufacturer continued and supported;
- Manufacturer discontinued but supported;
- Manufacturer discontinued and best endeavour support; and
- Manufacturer discontinued and not supported.

NR(HS) works with its suppliers to ensure early identification of impending obsolescence and to monitor the level of manufacturer support. Where long-term support contracts are not in place there is a risk that assets will become unsupported at relatively short notice.

Management plans are in place for all unsupported assets which are in the manufacturer discontinued and best endeavour/not supported states. The management plan is specific to the asset, for example, spares harvesting as types of equipment are renewed, or the development of new alternative components.

Track, civils and the overhead catenary system are not significantly impacted by obsolescence issues. Signalling and telecoms and mechanical and electrical assets are significantly impacted by obsolescence. The summary of obsolescence by route asset class is shown in Table 2.

	Mechanical and El	ectrical Assets	Signal and Communication Assets	
Not obsolete	Marshalling Boxes Axial Fans Seccardo Fans Attenuators Power Quality Filters Cross Passage Doors Stratford Pumps Stratford Control Route Pumps Route Control Tunnel Pipes 20% UPS Systems 30% Head House & Portal Controllers	Cooling Loops Signalling Room Aircon Signalling Room Gas Bottles Tunnel Fire Main Pipe Tunnel Fire Main Hydrants Detectors 10% of Tunnel lighting 60% of Building and trackside lighting 40% of Auxiliary Power Distribution 50% of Minor Aircon	80% of FOAEC FON 30% of VHME 50% of Signals Train Detection 90% ITCS LAN 60% of GSM-R - Handsets DTN	Switches Relays Markers 80% of POE – HPSS POE – MCEM 91 LAN 50% Automatic Train Protection

Table 2: Asset obsolescence summary

	Mechanical and Electrical Assets	Signal and Commu	nication Assets
Manufacturer discontinued (supported)	Jet Fans Chillers Fan Coil Units Detector Heads & Sounders Control Panels 50% of Minor Aircon 40% of Building and trackside lighting 60% of Auxiliary Power Distribution 70% Head House & Portal Controllers 80% UPS Systems 20% Dampers	GSM-R - Base Station 30% of GSM-R - Handsets	
Manufacturer discontinued (and best endeavour support)		20% of Rf Propagation Dewatering VCS RCCS EMMIS	20% of POE – HPSS
Manufacturer discontinued (not supported)	90% of Tunnel lighting Seccardo Fan VSD Axial Fans VSD	10% of GSM-R – Handsets 80% of Rf Propagation 50% of Signals 70% of VHME 10% ITCS	20% of FOAEC CCTV 50% Automatic Train Protection

The main Mechanical and Electrical assets that are affected by obsolete parts are the tunnel ventilation variable speed drives (VSDs) and the Uninterruptible Power Supply (UPS) units. The competitive tender for the VSDs is complete and all are planned to be replaced before the end of June 2026. The signalling room UPS systems were replaced during CP3 and all others on the HS1 route are scheduled to be replaced by May 2026.

Support for several critical components is due to end in CP4; as a result of this field equipment for EMMIS and VCS will require renewal. Both are complex and high-risk projects which will impact on the server applications. Work scopes for these projects were issued in July 2024. Further obsolescence issues were experienced with the VHME system in 2024/25. The system renewal planned for CP3 will be completed early in CP4 to support operational needs.

4.3 Asset management system

The asset management system was subject to extensive reviews and assurance activities in 2023/24 in support of the PR24 submission. During 2024/25 there have been fewer changes to the asset management system whilst the Draft and Final Determination reviews have been completed.

In April 2024, the London St. Pancras Highspeed Strategic Asset Management Plan (SAMP) was reviewed and subject to minor updates. The update reflected the positive move towards passenger growth, as we have moved away from uncertainty on exiting the pandemic. It included better line-of-sight between the Asset Management Objectives (AMO) and the Key Performance Indicator data used to measure achievement of the objectives. The scenarios and AMOs remain unchanged, as a result there is no impact on the Specific Asset Strategies (SASs) or renewals work bank. The NR(HS) SAMP was also subject to minor updates in November 2024 to include the Asset Decision Tree defined in the ISO55001 standard updated in July 2024 and to incorporate changes from the Draft Determination.

The SASs have not been updated since the PR24 submission, but during 2025/26 these documents will be reviewed and minor updates completed to ensure they reflect the current asset condition and performance and to incorporate any outputs from the Final Determination.

We are working together with NR(HS) to ensure we continue to mature our asset management through delivery of the CP4 commitments made in the PR24 5YAMS submission. These will support us to:

- Deliver efficient asset maintenance;
- Move towards more data driven asset management; and
- Use connected asset information systems.

We are developing the commitments to ensure they are Specific, Measurable, Achievable, Relevant and Timebound. The ORR has asked to be involved in this activity to ensure agreement can easily be reached once a commitment has been achieved. We will report our progress against delivering these commitments in the 2025/26 AMAS.

A number of site visits were conducted by London St. Pancras Highspeed this year to provide assurance of the asset life cycle delivery and asset management decision making. These included visits with maintenance teams, visits to renewal projects and a visit to the Eurotunnel interface area.

In March 2025, we completed work on a revised Adaptation Action Plan to consider the priority physical climate change risks. Work included a review of risk to our assets based on the existing climate change risk assessment and trends that are being observed. A number of workshops were held and attended by a range of stakeholders. Through these workshops we agreed a number of mitigation actions for the short (2025 - 2030), medium (2030 – 2040) and long term (2040+). We covered seven asset classes (Culverts; Earthworks and Retaining Walls; Electrification; Signalling and Telecoms; Stations; Trackwork; and Tunnels) and five climate hazards (flooding and precipitation, drought, heat stress, and windstorms). Seven interdependent risks were also identified, particularly relating to the power and water sectors, and third-party asset management. The majority of the mitigation actions were 'soft actions' focusing on further studies and information collation, with a few 'hard actions' to introduce physical mitigations over the medium and long term. The Adaptation Action Plan will be embedded into the SASs as we move through CP4.

4.4 Asset information

Significant progress has been made during 2024/25 to move to a new Enterprise Asset Management System, EAMS2.0. The new system will provide NR(HS) with an improved capability and structure through which to manage the assets, including maintenance planning and delivery, and the opportunity to transform the maturity of asset information. The new system will provide:

• Planned preventive maintenance scheduling aligned to the Asset Data Dictionary;

- Fault management and reactive maintenance scheduling;
- Improved reporting capabilities; and
- Mobility (handheld devices and maintenance scripting).

As we enter CP4, the programme will continue to develop more advanced capabilities in the new system in a prioritised phasing. This will include integration with other tools and systems such as Geographic Information Systems (GIS).

4.4.1. EAMS2.0

In April 2024, NR(HS) concluded the selection process for the provider of the replacement for the Oracle EAMS module, with the appointment of AMX Asset Management Solutions Ltd. Contract signing and supplier mobilisation took place in May and June 2024. The project has successfully progressed at pace and the first asset group (M&E) moved to EAMS2.0 in March 2025.

Figure 10: Milestone dates for EAMS2.0 rollout



As part of the mobilisation and in preparation for the software implementation, NR(HS) and AMX carried out an in-depth review of current asset registers, maintenance activity and associated processes for delivery of maintenance activity to understand the discipline specific requirements, prior to go live. This resulted in an updated programme for deployment of the software which is longer than NR(HS)'s initial aspirations while still following a phased rollout out by discipline/sub discipline as shown in Figure 10. All assets will be in the new EAMS2.0 by August 2026.

Given the complexities of implementing a new system whilst improving the inputs to it, digitising some of the manual record keeping and applying learning lessons from the pilot discipline (M&E), the updated programme is attainable and provides NR(HS) with a solid foundation for improving asset information and data maturity in the future.

4.4.2. Data improvement

This year we have continued to develop the Asset Data Model to be used for EAMS2.0. This is being structured to align to the Asset Data Dictionary and NR(HS) maintenance standards.

During the roll out of EAMS2.0, the asset data will be validated and any gaps identified. Following the go live date for each asset discipline gaps in the data will be targeted for population. This process will be simplified in EAMS2.0 as it includes a mobile platform which will make the addition of data more efficient. An example of the changes to improve asset data is around the relationships between assets. The current EAMS system does not have consistent asset hierarchies. This area is included within the asset discipline roll out and will identify the new levels of asset data hierarchy. This will result in improved understanding of the assets at a sub-system level within their discipline and support more effective asset management and decision making.

Another similar area we have started on this year is within the drainage asset inventory. Whilst the individual assets are recorded, we are now grouping them together as 'virtual assets' to reflect sub-systems, such as drainage runs between receptors and outfalls. Again, this will improve the asset decision making process and will support the work needed for EAMS2.0.

4.5 CP3 commitments

The PR19 ORR Final Determination included 28 route asset management recommendations and the PR19 DfT Final Decision included 11 station asset management recommendations. We provide quarterly updates on progress against these recommendations to the ORR.

At the end of 2023/24 (as reported in our 2023/24 AMAS) four of the route recommendations remained open; all station recommendations were complete. A summary of progress against the four remaining route recommendations is set out in Appendix A1. All four have now been completed.

4.6 Asset management maturity

London St. Pancras Highspeed: Following successful completion of the Stage 2 assessment in April 2024, London St. Pancras Highspeed was awarded ISO55001 certification for route and station asset management in July 2024.

NR(HS): NR(HS) has held ISO55001 certification for route assets since 2018. In July 2024 BSI undertook a certification assessment of the documented management system covering stations, depots and the control centre at Ashford. The assessment included site visits to validate evidence of compliance with ISO55001. The assessment was successfully completed and these assets have been added to the existing certification for route assets.

UKPNS: UKPNS continues to hold certification to the ISO55001 Asset Management Standard and regular annual audits take place to maintain this certification.

4.7 Research and Development

All CP3 R&D funds have now been spent or committed to schemes; there are no unspent funds to carry over to CP4.

A total of £760k remained in the CP3 Research and Development (R&D) fund at the end of 2023/24. A full list of prioritised projects for 2024/25 was assessed at the April 2024 R&D Panel and the final projects were approved at the June 2024 R&D Panel. One further initiative was approved at the January 2025 R&D panel. There are currently 18 R&D projects in progress, including two Overhead Line Equipment (OLE) monitoring trials which are funded separately via the NR(HS) R&D budget; an overview of these projects is included in Appendix A3.

Highlights of the year include:

- Delivering the Enterprise Digital Twin in conjunction with Hexagon Consultants, demonstrating how to revolutionise the planning from system through to tactical delivery level and gain agility in planning (see below);
- Commencing the HS1 Dynamic Operational Model project which will benefit scenario planning and understanding of capacity for all London St. Pancras Highspeed stakeholders (see below);
- Commencing research on drone inspection of major structures;
- Researching how to deliver more efficient tactical management of planning and possession effort in conjunction with the Enterprise Digital Twin; and
- Continued research of different dynamic OLE monitoring techniques across different HS1 rolling stock using different equipment in order to understand the requirements for transformation of inspection and measurement of the OLE asset class.

During the year, we have delivered the **Enterprise Digital Twin** proof of concept in collaboration with Hexagon Consultants and Aerogility. This project has been a significant milestone for London St. Pancras Highspeed, showcasing our commitment to innovation and excellence in digital transformation. This project has provided London St. Pancras Highspeed with a powerful tool to optimise the planning and delivery of inspections, maintenance and renewals to reduce costs, and enhance safety across our route operations. The success of the project aided the London St. Pancras Highspeed team in developing our first R&D Strategy for 2025-2030; this strategy includes a detailed technology-focused approach, incorporating applied Enterprise Architecture to support the rollout of future R&D projects. The Enterprise Digital Twin project has set a strong foundation for future R&D initiatives at London St. Pancras Highspeed. The insights gained from this project will continue to drive transformative change, ensuring the reliability and efficiency of our services.

We have recently commenced the **HS1 Dynamic Operational Model** project, a cutting-edge initiative aimed at enhancing the operational efficiency and resilience of the HS1 network. This project is being developed in collaboration with JFRail Consulting Ltd. The project will create a digital twin of the HS1 network, leveraging advanced AI and simulation technologies. The primary goal is to optimise the performance, safety, and cost-effectiveness of HS1 operations by providing real-time insights and predictive analytics. The BRAVE (Birmingham Rail Asset Virtual Environment) model, developed by the University of Birmingham, is a key component of the project. The HS1 model will be synchronised with a Eurotunnel model allowing seamless modelling of the two networks together.

We successfully delivered the R&D Showcase in May 2024, with good buy-in from all stakeholders. Through the PR24 process, we agreed key changes to the R&D portfolio for CP4, including NR(HS) holding the fund, updated governance, new targets and a new operating model for R&D. The Final Determination confirmed a 100% increase in R&D funding for CP4, giving a total of £4m to invest.

Early in CP3, we collaborated with Connected Places Catapult to identify our highest priority areas and develop three challenge statements for our focus areas of automated inspection, cross-domain integration and efficient possessions. We engaged a consultant to refresh these challenge statements for CP4 and they proposed a framework of Themes, Capabilities and Outcomes. This new focus is much wider reaching than the CP3 challenge statements, and centres on key challenges including asset management maturity and the need to integrate data 34

and digital technology across our R&D activities. Outputs were presented at the CP4 R&D Launch Event on 29 April 2025. Outcomes from all trials, with details of how recommendations from successful trials are being taken forward were also presented.

5 RENEWALS PLANNING AND DELIVERY

19 of the 29 route milestones were fully achieved in year 5. The remaining 10 are all in flight with six more than 40% complete. Of the 19 milestones achieved, seven delivered greater volume than planned, utilising resource and possession opportunity.

9 of the 10 station renewals milestones in the year were achieved, with the majority being LET renewals. Space heating was prolonged into year 1 of CP4 through the change control process.

Efficiency reporting across CP3 projects shows clear gains, with major schemes such as HPSS renewal and ITCS test benches completing significantly under budget. This reflects an increasingly mature renewals function with improved cost control and decision-making.

CP4 planning is advanced, with a new governance framework, digital tools and a portfolio-based delivery strategy now in place. A strong pipeline of 2025/26 projects is aligned to strategic objectives, supported by stakeholder engagement and improved assurance processes.

In accordance with the Concession Agreement Schedule 10 Section 6.2 and HS1 Lease Section 4.6, this section provides an overview of the renewals work undertaken in 2024/25 and the work planned for 2025/26. It also highlights key advances in the maturity of renewals governance and assurance, showcasing ongoing efforts to enhance the management of critical infrastructure assets.

A detailed breakdown of route and stations renewals performance continues to be shared with stakeholders, including ORR, DfT and the TOCs, at the quarterly Asset Renewals Review session ensuring transparency and accountability.

5.1 Route renewals delivery in 2024/25

Milestones

- In year 5 of CP3, two tiers of milestones were introduced: Key Portfolio Milestones and Project-Level Milestones, both aligned with the completion of CP3 and readiness for CP4.
- Of the 29 route milestones, 19 have been achieved.
- Milestones still in progress are tied to ongoing CP4 projects.
- Some milestones were overachieved due to additional volumes being delivered.
- Performance metrics were refined to link time, cost, and volume across asset types.
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• Milestones were tailored to reflect asset criticality-for instance, track crossings were monitored individually, while marker boards were grouped to represent campaign-level delivery. This structure ensures strategic focus and alignment with asset stewardship objectives.

Figure 11 shows route renewals milestones delivered in the year against the baseline plan.
Figure 11: Route renewals milestone progress

Project Name	Milestone Name	Baseline Completion	Actual Completion	% Complete	Commentary
Expansion Joints (LEJ'S)	Works Completion - Finish on Site	25/P10	25/P10	200%	4 additional units installed
Track Crossings Renewal - 2021 St Pancras	Works Completion - Finish on Site	25/P06	25/P07	200%	1 additional crossing
Local Release Command Switches	Works Completion - Finish on Site	25/P08	25/P06	187%	12 additional units
Boundary Fencing	Works Completion - Finish on Site	25/P07	25/P05	180%	Additional 80% to baseline
Emergency Replacement Switches & Elementary Zone Protection	Works Completion - Finish on Site - Tranche 1	25/P13	25/P11	155%	16 additional units
Passive Drainage (Ashford Box) – Well Clearance	Works Completion - Finish on Site	25/P08	25/P08	120%	2 additional units cleared
Section 1 Re-railing	Works Completion - Finish on Site	25/P10	25/P11	108%	
Track IBJ's	Works Completion - Finish on Site	25/P13	25/P11	100%	
Track Switch Blades St Pancras 2017	Works Completion - Finish on Site	25/P08	25/P11	100%	
Passive Drainage (Ashford Box)	Works Completion - Finish on Site	25/P13	25/P10	100%	
Track Switch Blades St Pancras 2042	Works Completion - Finish on Site	25/P11	25/P08	100%	
Track Crossings Renewal - Diamond 2C St Pancras	Works Completion - Finish on Site	25/P07	25/P07	100%	
Road Bridge Expansion Joints	Works Completion - Finish on Site	25/P04	25/P05	100%	
Track Crossings Renewal - 2151 Ebbsfleet	Works Completion - Finish on Site	25/P04	25/P04	100%	Added to Y5 Scope
Local Area Network	Works Completion - Finish on Site	25/P04	25/P04	100%	
Track Crossings Renewal 2108 Ebbsfleet	Works Completion - Finish on Site	25/P03	25/P03	100%	
Track Switch Blades St Pancras 2020	Works Completion - Finish on Site	25/P02	25/P02	100%	
Track Switch Blades St Pancras 2027	Works Completion - Finish on Site	25/P02	25/P02	100%	
Route Data Transmission Network	DTN Cut Over Commissioning Complete (Pre SOAK Testing)	25/P01	25/P01	100%	CP2 renewal - Complex multi- year scheme impacted by Covid 19, is now closed.
Static Switches and Local Rectifiers	Works Completion - Finish on Site	25/P05	Jun 25'	95%	Prolonged in Q1 of CP4
Long Tunnel Drainage	Works Completion - Finish on Site	25/P13	Dec 25'	60%	Prolonged and key scheme in Y1 of CP4
Track Re-Railing at St Pancras	Works Completion - Finish on Site	25/P13	Dec 25'	50%	Prolonged due to access availability
Point Operating Equipment	Works Completion - Finish on Site	25/P13	Dec 25'	44%	Prolonged into Y1
Acoustic Barriers - 413A (St Pancras)	Works Completion - Finish on Site	25/P10	Dec 25'	40%	Prolonged due to resource availability to Q2
Borehole Pumps at Stratford	Works Completion - Finish on Site	25/P13	Mar 26'	40%	Prolonged to Q3
Manual Operating Device Box	Works Completion - Finish on Site	25/P13	Mar 26'	30%	Prolonged for trial in Y1 due to suitable alternative product not being available
Renewal of UPS, Rectifiers and Batteries	Works Completion - Finish on Site	25/P13	Mar 26'	30%	Prolonged to CP4 major contract award which required more work than anticipated
Track Switch Blades St Pancras 2045	Works Completion - Finish on Site	25/P07	Dec 25'	30%	Prolonged due to access availability
Road Rail Access Point	Works Completion - Finish on Site	25/P06	Dec 25'	20%	Prolonged to Y1 due to delayed material delivery

Year 5 has continued the agile approach to renewals delivery, taking the opportunity to deliver a greater volume than planned where resource and circumstances have allowed. In annualised campaigns, such as local release command switches renewals, increased volume does not always result in additional milestones, as much of the work follows a repeated delivery pattern.

19 of the 29 year 5 milestones have been fully completed. The remaining ten milestones are all in flight, with slower progress primarily due to access constraints, internal resource availability or scope adjustments. Despite these challenges, all are progressing well and are expected to be completed by December 2025.

Where opportunities allowed or scope developed, seven of the completed milestones exceeded the baseline plan in terms of volumes delivered. This was made possible by utilising available procured materials and effectively resourcing the works to maximise delivery. For example, four additional expansion joints were installed, one additional track crossing was completed and 16 extra units were delivered under the EZP & ERS programme.

Key delivery highlights in 2024/25 include:

- Data Transmission Network (DTN): A critical milestone was successfully completed with the Cut Over Completion of the DTN and Voice Telephony System migration in P1. The project overcame challenges such as extended delivery timelines and budget impacts due to Covid-19. Despite these challenges, the key migration milestone was completed in P1, with the remaining recoveries workstream completed in P9.
- **Crossing and switches:** Focus on operational reliability resulted in prioritisation of the crossing and switches portfolio, driven by asset condition surveys. Seven crossings were delivered.
- Ashford Box drainage: The Ashford Box has a bespoke drainage solution in the form of internal permanent gravity wells (passive), which are over 15m deep with horizontal permeability. The renewal this year looked at developing and implementing a solution to clear these wells using a high-pressure cleaning system in form of a drain train. Phase 1 works are complete, with 12 wells cleared. The remaining wells will be cleared in Phase 2.
- Highway bridge expansion joints: This scheme addressed defects such as potholes and rutting adjacent to the expansion joints. This year saw the completion of the final renewal at Stratford East emergency road access.
- Local Area Network (LAN) migration: Most of the LAN network components were obsolete. There was no upgrade path for the existing hardware, so replacement was completed in a phased migration away from the existing Ashford IECC LAN; this transition was completed without service disruption. This renewal has provided a secure, well supported system using the most cost-effective method balanced with the least disruptive methodology, ensuring the system can be maintained for a minimum of 10 years.
- **Re-rail 3k:** The renewal of life expired plain line rails (2.1 km at Thurrock and 0.51 km at St. Pancras). The project is expected to finish in Q1 of Y5.

Volume and cost

Figure 12 shows the route renewals volume and cost of work done in 2024/25.

Figure 12: Route renewals volume and cost of work done



- Actual volume delivery was 178 compared with planned volume delivery of 184 (96% of plan)
- Actual spend was £12.2m compared with planned spend of £9.8m (£2.4m over plan)
- £4.3m of actual spend was for schemes accelerated from CP4

To aid comparison of actuals v baseline, we have split the year 5 volumes and costs into CP2 prolonged schemes, CP3 schemes and schemes accelerated from CP4 as shown in Table 3.

		Volume		Cost		
	Planned (Baseline)	Delivered (Actual)	Prolonged to CP4	Forecast (Baseline)	Outturn (Actual)	Variance
CP2 prolonged	1	1	0	£1.0m	£1.5m	+£0.5m
CP3	183	167	16	£8.8m	£6.4m	-£2.4m
CP4 accelerated	0	10	0	_	£4.3m	+£4.3m
Total	184	178	16	£9.8m	£12.2m	+£2.4m

Table 3: CP3 route renewals volume and cost breakdown

The CP2 DTN volume was successfully delivered, though the project utilised risk allowance of £0.5 million due to technical complexities and interface issues with station communication systems, which also led to timeline extensions. Year 5 focused on project closeout and final payments, the project was delivered within the risk allocation.

167 CP3 volumes were delivered against 183 planned. The 16 volumes not delivered in CP3 are all in flight and have been prolonged to CP4. The total cost of the CP3 volumes not fully delivered in CP3 was £2.4m. The significant renewals that were not fully delivered included UPS, St. Pancras fibre optic signalling and Stratford borehole pumps.

To offset the CP3 volumes prolonged into CP4, opportunities were explored to undertake other renewals. 10 volumes were brought forward from the early years of CP4 to address asset condition at a cost of £4.3m. The significant renewals were track crossings, track switch blades and CP4 development works.

All movements between CP3 and CP4 have been managed via the Renewals Board change control process. Stakeholders, including ORR, DfT and the TOCs, are updated on the changes at the Asset Renewals Review quarterly meetings.

5.2 Station renewals delivery in 2024/25

This year saw the delivery of six lift and escalator renewals. This is a significant achievement for the LET portfolio and provides readiness for the increased work bank in CP4. The customer information screens, including mainboard and totems, were renewed at Stratford and Ebbsfleet.

Figure 13 shows milestone progress for 2024/25. 9 of the 10 year 5 milestones were fully completed. Space heating was prolonged into year 1 of CP4 through the change control process.

Figure 13: Station renewals milestone progress

Project Name	Milestone Name	Baseline Completion	Actual Completion	% Complete	Commentary
Boosted Power Water System (St Pancras)	Works Completion	25/P01	25/P01	100%	
CIS Phase 3 – Stratford Main Boards and Totems Complete	Works Completion	25/P02	25/P02	100%	
CIS Phase 3 – Ebbsfleet Main Boards and Totems	Works Completion	25/P04	25/P04	100%	
Lift and Escalators – Stratford Escalator 04	Works Completion	25/P02	25/P04	100%	
Lift and Escalators – St P lift PL02	Works Completion	25/P03	25/P03	100%	
Lift and Escalators – St P Escalator 2.1.2	Works Completion	25/P04	25/P04	100%	
Lift and Escalators –St P Lift 2.2	Works Completion	25/P09	25/P13	100%	
St Pancras UPS Replacement	Works Completion	25/P03	25/P03	100%	
Survey and Renewal of Floor Finishes	Works Completion	25/P11	25/P13	100%	
Space Heating, St P, Stratford and Ebbsfleet	Contract Award	25/P13		30%	Prolonged into CP4 y1 (Associated Volume 1)

Key milestones achieved in 2024/25 are as follows:

LETs: The LET portfolio is one of the key station deliverables with over 67 assets planned for renewal in CP3 to CP5. Good progress has been made this year to understand the most efficient ways and customer-focused approach to renewing these assets. As noted in Section 3.2, renewal of Lift 2.1 at St. Pancras was accelerated from CP4 as the lift was an essential asset for the planned introduction of the border Entry Exit System (EES) (when October 2024 was the EU rollout date) as it served one of the three EES pre-registration kiosk locations.

Table 4: LET renewals delivery

Asset	% complete	Notes
Stratford - Escalator 4	100%	Works completed in P4 (planned for P2), with delays encountered during commissioning due to a fault.
St. Pancras - Escalator - 2.1.2	100%	Asset delivered in P4 on target.
St. Pancras - Escalator 2.2.2 (EMR)	100%	Asset delivered in P4 on target.
Stratford - Lift PI02	100%	Asset delivered in P3 on target.
St. Pancras Lift 2.1 - Serving EMR Concourse	100%	Asset delivered in P9 on target.
St. Pancras Lift 2.2 - Serving EMR Concourse	100%	Asset delivered in P13.
St. Pancras Lift 4.2 - Serving Platforms 11-13	20%	Asset renewal deferred into CP4, initial designs and proposals for temporary lift have been presented. Expected to be completed by Dec 2025. 98% availability maintained.

Delivery of the LET refurbishment projects has been strong overall. However, challenges have arisen with delays in asset handback and some equipment being taken out of service shortly after commissioning. To address this, London St. Pancras Highspeed has been working closely with NR(HS) to strengthen handback procedures and improve testing and commissioning processes. An analysis has been undertaken to better understand lift and escalator downtime in the years following renewal works. Stakeholder engagement has also been enhanced through regular catch-up sessions with TOCs, ensuring timely communication and coordinated planning of the LET programme.

Customer information screens (CIS): The CIS project has progressed well, successfully achieving milestones throughout its phases. Following Phase 1 delivery of the St. Pancras mainboard, Phase 2 replaced the St. Pancras SETL gateline and totems, efficiently managed under possession and isolation arrangements. Phase 3 renewed the gatelines and totems at Stratford and Ebbsfleet, including all associated electrical and remediation works. Phase 4 is progressing with the development of the innovative St. Pancras SETL 'Jukebox' CIS solution, showcasing the project's commitment to delivering modern and reliable customer information systems.

Space heating: London St. Pancras Highspeed led the development of the space heating project targeting the introduction of air source heat pump (ASHP) technology at St. Pancras, Stratford, and Ebbsfleet. Detailed designs for St. Pancras and initial designs for the other two sites are complete. A constructability and feasibility study will be delivered in Year 1 of CP4. While the designs for Stratford and Ebbsfleet appear feasible, St. Pancras presents challenges due to changes to EU specifications for chillers and the roof-mounted plant, which may require road closures. These issues may make ASHPs unsuitable for St. Pancras. Delivery will continue into CP4 due to design complexity. This has been communicated to ORR, DfT and TOCs with additional funding accounted for in the PR24 cost models. Procurement and delivery strategies are in development and a specialist consultant has been brought into manage the next phase.

Boosted potable water systems: The St. Pancras water system was failing in year 4, resulting in system shutdowns and causing damage to the pipes and valves. In addition, the system was not ⁴¹

energy efficient. The renewal successfully completed in P1 delivered the benefits of reliable and energy efficient water systems for the station. The old system at Ebbsfleet had not demonstrated equivalent failure rates, nor was the demand or usage comparable. Although the system at Ebbsfleet had multiple pumps, the logic controller remained a single point of failure. A new logic controller was installed, and a back-up copy of the software was provided for the system.

Survey and renewal of floor finishes (Stratford and Ebbsfleet): The objective of this project was to mitigate any safety or structural concerns at the two stations through the restoration of the platform floor surfaces and by realigning / installing expansion joints at Ebbsfleet.

St. Pancras UPS replacement: The project replaced the Emergency Lighting System UPS unit. The existing UPS was beyond economical repair and had exceeded its life expectancy of over 16 years.

Low Voltage (LV) distribution board and DALI lighting: The renewal of LV distribution boards and kiosks at St. Pancras and Ebbsfleet was originally planned for year 4; however, the proposed scope and initial market engagement required refinement. The scope was revisited in year 5 and retendered to improve value for money. The revised approach prioritised the most degraded assets, with works expanded at St. Pancras and limited to three critical kiosks at Ebbsfleet, aligning with available budget headroom. Additional efficiencies were identified by incorporating the DALI lighting scheme into the same procurement exercise. The overarching strategy remains focused on mitigating potential LV power loss across stations. A condition survey has been completed to inform and validate the renewal priorities. The renewal is 30% complete and will see completion in Q1 of 2025/26:

- The LV panels, cubicles and kiosks, which use obsolete switchgear at all three stations (St. Pancras, Stratford, Ebbsfleet).
- Address obsolescence issues on contactor panels and sub main distribution boards.
- Three LV kiosks on the Ebbsfleet platforms which are in a significantly degraded condition due to exposure to the elements.

St. Pancras Toilet Refurbishment: The project, accelerated from CP4 using CP3 available monies, renewed the toilet facilities in the international zone of St. Pancras International. This included improving the overall design, functionality, and cleanliness of the facilities.

Volume and cost

Figure 14 shows the station renewals volume and cost of work done in 2024/25.



Figure 14: Station renewals volume and cost of work done

- Actual volume delivery was 86 compared with planned volume delivery of 75 (115% of plan).
- Actual spend was £5.1m compared with planned spend of £3.6m (£1.5m over plan)

The increased volume and spend were due to the following schemes accelerated from CP4:

- St. Pancras Lift 2.1 Acceleration driven by asset condition
- St. Pancras escalator 2.2.2 Acceleration driven by asset condition
- St. Pancras Toilet Refurbishment Additional scheme to support functionality
- LV Distribution Boards Additional scheme to support obsolescence issues (9 volumes)

All movements between CP3 and CP4 have been managed via the Renewals Board change control process. Stakeholders, including ORR, DfT and the TOCs, are updated on the changes at the Asset Renewals Review quarterly meetings.

5.3 Route and stations efficiency reporting

Table 5 shows the outturn cost for route and station projects which reached Gate 5 in 2024/25 compared with the efficient price included in the PRI9 determination. This reporting is consistent with the efficiency reporting in previous AMASs.

As part of the CP4 governance and assurance improvements, we will establish clear efficiency baselines, track benefits through year-on-year comparisons of outturn costs, unit rates, and programme performance.

Table 5: PR19 budget v final	costs for completed projects
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Project name	PR19 cost	Outturn cost	Variance	Commentary
Boundary fencing	£0.6m	£0.2m	-£0.4m	Underspend was due to deferral of part of the route (£366k), lower than expected material costs (£8k) and internal NR(HS) costs (£26k).
ITCS Test Benches	£2.2m	£1.8m	-£0.4m	The underspend resulted from negotiated discounts with suppliers.
			-£2.5m	Volume adjusted to reflect the final technical work scope for the project, which prioritises replacement of specific
HPSS renewal	£3.2m	£0.7m	-£0.04m (against Gate 4)	components of the points operating equipment. By undertaking this change in strategy, the project saw an efficiency against the Gate 4 Authority of £37.7k
Marker boards	£0.3m	£0.1m	-£0.2m	Fix on failure strategy adopted and delivered by the maintenance team aligning with O&M works.
EZP & ERS	£0.6m	£0.3m	-£0.3m	This renewed enhanced emergency response systems. Reduction in volume from 250 to 100 after asset condition surveys.
UPS Renewal Ebbsfleet/ Stratford	£0.3m	£0.2m	-£0.1m	The underspend was due to efficient project execution and lower material costs

5.4 Route and stations renewals delivery proposed for 2025/26

As described in our PR24 5YAMS and agreed through joint governance workshops, the key principles driving the CP4 streamlined governance process are:

- The PR24 Final Determination provides the authority to allocate funding in accordance with the approved proposals, ensuring alignment with agreed-upon strategies.
- Risks for the control period will be profiled and effectively managed between London St. Pancras Highspeed and NR(HS), leveraging the risk framework established during the determination process.
- A portfolio-level approach will be applied, ensuring integrated and coordinated decisionmaking across all renewals projects, focusing on the Strategic Milestones.

Considering these principles, a full review of the workbank has been undertaken. A portfolio structure has been developed which is driven by discipline packaging as well as consideration of the future delivery strategy. This will be reported in the quarterly Asset Renewals Review packs. Progress will be reported against each of the portfolio and strategic projects in each portfolio on a quarterly basis. We will closely monitor the progress of these projects and timeline through the periodic Renewals Board to ensure assurance and alignment with strategic objectives.

Table 6 shows the 15 strategic portfolio milestones planned for delivery in 2025/26.

Portfolio	Strategic portfolio milestones	Completion date	Scope
	Long Tunnel Drainage Works Completion - Finish on Site	Sep 2025	Clearing of 16.5km of drainage and replacement of 40 grout plugs.
Civils	Civils Framework Contract Award	Dec 2025	The Civils Framework enables the delivery of route wide renewals (access staircases, boundary fencing, acoustic barriers, borehole pumps)
Data and Communications	St P Fibre Optic Signalling Approval in Principle Design Complete	Jun 2025	Renewal of obsolete fibre optic signals at 72 locations.
Mechanical and Electrical	Uninterrupted Power Supply Start on Site	Jun 2025	Renewal of route UPS at 22 locations.
Overhead Line	Motorised Section Switches Detailed Design Complete	Dec 2025	Replacement of 64 isolation switches, with year 1 focused on procurement, design, and initial operational critical delivery.
	Motorised Section Switches Start on Site	Mar 2026	
	LET CP4 Yr 2+ Framework Contract Award	Dec 2025	This framework to cover a minimum 5 year term from year 2 of CP4.
	LET - Yr 1 Works Completion Finish on Site	Mar 2026	8 Lift and Escalators planned. Year 1 being delivered under current contract.
Stations	Space Heating (Stratford & Ebbsfleet) Contract Scope & Site Information Complete	Mar 2026	
	Space Heating (St. Pancras) Technical Review Complete Gate 3B	Dec 2025	Space Heating project development works will be completed that provides feasibility and constructability of Air Source heat pump solution.
	St. Pancras Toilet Renewal Client Technical Requirements Approved	Sep 2025	Toilet refurbishment works at St. Pancras Station.
Track	Road Rail Access Point Technical Work Scope SRP Approval	Mar 2026	RRAP at St. Pancras maintenance sidings to be renewed by Aug 2025. R&D will deliver Technical Scope and SRP for remaining RRAP (Portfolio Milestone).
	Acoustic Panels (St. Pancras)	Mar 2026	The acoustic panels at St. Pancras station will be renewed during Christmas 2025 shut down.

Table 6: Strategic portfolio milestones planned for delivery in 2025/26

Portfolio	Strategic portfolio milestones	Completion date	Scope
	Works Completion - Finish on Site		
Ballast Mid-life Renewal	Contractor Scope and Early Involvement Approved Gate 2	Sep 2025	Development work in year 1 will look at planning, haulage, engineering issues and constructability. Stakeholder consultation working groups will be set up with management plans drafted.
	Specialist assurance consultant Contract Award	Sep 2025	London St. Pancras Highspeed, Technical Specialist and Assurance support function.

There is an increased focus on long-term planning, looking beyond year 1 to consider the entire control period. As a result, some activities delivered in year 1 are strategically aligned to support objectives across the whole of CP4. This approach demands early action on procurement, design, and delivery to enable future years' programmes. To support this, a five-year overview plan is being developed to provide a clear status of key strategic projects throughout CP4.

5.5 CP4 renewals governance and assurance

Significant progress has been made in preparation for CP4 renewals, aligning project readiness with the goals and milestones outlined in the CP4 Development Paper. Progress has been shared with ORR and DfT through the PR24 process.

Work complete

- Scope development: Scope development is 100% complete with 95% of Gate 1 deliverables finalised. This includes definition of renewal scope, supporting asset condition assessments, cost and risk estimates, programme planning and stakeholder engagement. Completion of this phase provides the foundation to progress to Gate 2, where design development, technical assurance, procurement strategy and delivery readiness will be further advanced.
- Contract and procurement:
 - o **Civils framework:** Pre-Qualification Questionnaire moderations have been undertaken on Lot 1 Buildings and Lot 2 Civils. ITT issued and responses expected in July 2025.
 - Stations LETs: CP4 year 1 assets are varied into Schindler's contract and have undergone planning. Sourcing strategy approval for years 2 to 5 is in progress and expected to be complete in January 2026 with London St. Pancras Highspeed supporting tender activities. Contract Notice to be published in February 2026.
 - Stations M&E package: Ongoing with tenders in place for extension of existing maintenance contracts. Contract and procurement activity for year 1 schemes is now underway separately.

Governance Improvement Initiatives

In year 5, London St. Pancras Highspeed implemented several initiatives to enhance governance and assurance, ensuring alignment with industry standards and reinforcing the asset stewardship purpose.

Collaborative knowledge sharing: Discussions across various forums have strengthened collaboration between London St. Pancras Highspeed and NR(HS) this year. The sessions enhanced the understanding of renewals in the context of the periodic review process and escrow framework. Identification of both strengths and areas for improvement is shaping the direction of CP4 plans and key initiatives.

Areas requiring further maturity included alignment of KPIs, structured governance communication, stakeholder engagement strategies, change management tools and streamlining of governance processes. Specific actions in these areas have already been undertaken with key themes as described below.

Ongoing maturity initiatives

- Workflow management tool and integrated reporting: We have procured and are currently implementing a software management tool to support the renewals portfolio. This tool is designed to centralise authority levels, streamline the approvals process and eliminate reliance on email-based submissions, enhancing both visibility and submission quality. When integrated with planning tools such as Primavera and cost interface systems, it will enable an automated application process, including contingency drawdown and change control functionality.
- **Renewals Governance Handbook:** A digital and interactive handbook has been developed which aligns to the portfolio-level approach; this provides interactive guidance on the renewals process including delivery and approval structures, assurance requirements, templates, escrow fund management etc. The governance process has been streamlined to reduce gate stages, focus on project planning/milestone tracking and stakeholder aligned reporting.
- **Reporting and Portfolio KPIs:** A new reporting framework and set of KPIs have been developed to standardise data for meaningful comparisons across portfolios, focusing on cost, milestones and delivery volumes. The revised structure, shared in Q4, will be used for reporting from Q1 of 2025/26. Strategic projects –selected for their operational, commercial, and delivery significance will be reported periodically, while broader portfolio projects will follow a quarterly reporting cycle. This approach enables clearer insights into performance, efficiency, and portfolio health.

These measures have strengthened governance, improved assurance, and positioned the renewals programme for sustained success. This has meant that of the 20 route renewals projects for year 1 of CP4, authority for 17 projects has already been approved.

5.6 UKPNS asset renewals

UKPNS operates, maintains, and renews the electrical substations and high voltage electricity distribution network on HS1. Significant renewal and replacement projects in 2024/25 were:

Supervisory Control and Data Acquisition (SCADA) replacement: The project completed during the year and the system is fully operational with staff training having taken place. The SCADA system includes an Asset Performance Monitoring System which gives UKPNS the ability to 47

monitor the performance of certain electrical assets. The software has the capacity to analyse a large data set, understand the gaps in the data set, analyse and understand key trends towards faults, predict faults before they happen, optimise maintenance strategy and learn and adjust ongoing operations. This will give UKPNS enhanced asset performance monitoring capabilities and provide additional resilience to the overall electric distribution system and HS1 railway.

Static VAR Compensators (SVCs) and load balancer control systems renewal and upgrade: As part of obsolescence management, UKPNS has replaced the control computers which were approaching the end of their product design life and manufacturer support. This project renewed the control computers on the SVCs and the load balancer from the Mach 2.0 system to the latest Mach 3.0 system as well as other components of the SVC such as the ancillaries, cooling control cubicles and protection relays. This project is the largest single project since the initial build of the power system. During the year, the remaining commissioning tests took place on the Sellindge load balancer. UKPNS was able to successfully feed from Sellindge during the year. Hitachi has trained UKPNS is awaiting final documentation from Hitachi.

Relay renewals: Work continued on the P44T relay renewal; new relays were successfully installed and commissioned on two of the four circuits at Choats Road. The remaining circuits are scheduled to complete in the next year. The final P143 relay was successfully installed and commissioned at Singlewell. The P143 project installed seven new relays at Singlewell and Sellindge feeder stations to replace the existing relays which were outside the manufacturer's product support envelope.

SVC cooler banks: The scope of this project was to renew the cooler banks on all six SVCs at Singlewell and Barking. The project was completed during the year. At the start of the project, UKPNS purchased a new set of cooler banks which enabled the refurbishment of the older cooler banks, minimising the construction of new cooler banks and therefore reducing environmental impact. The refurbished cooler banks were successfully reinstalled and went through a robust testing programme.

Sellindge reactor renewal: A reactor at Sellindge feeder station developed a fault due to thermal ageing. UKPNS took the decision to replace this reactor and during the year the new reactor was successfully installed and commissioned. UKPNS is undertaking a detailed assessment of the existing reactors to inform future asset renewal plans.

Building renewals: During the year several renewals were undertaken at UKPNS buildings on the HS1 network. This included renewal of air conditioning units, doors and fire alarm systems and refurbishment of the staff areas at Singlewell feeder station.

6 UPGRADES

The European Rail Traffic Management System (ERTMS) is a large signalling project that we currently anticipate implementing in CP5. We need to undertake early design and planning works to appropriately and efficiently plan for the full ERTMS project. These ERTMS early works are underway and should be concluded by June 2025. London St. Pancras Highspeed competitively procured the supplier of these early works and the total cost of the project is £577k. EIL and SETL were involved in the tender evaluation process. The project cost for these

early works is being recovered via an Additional IRC (AIRC) over a one year period from Q4 2024/25.

7 FINANCIAL REPORTING

Income in the first three years of CP3 was much lower than the CP3 budget due to the reduced First Working Timetables (FWTs) from both EIL and SETL. The shortfall has been recovered through the volume reopener model. O&M revenue of £111.5m is £12.1m above the CP3 forecast as a result of higher recovery on EIL, SETL and freight in the last two years of the control period.

Following a long review and negotiation period we have successfully achieved a business rate reduction for the period 1 April 2023 to 31 March 2026. The original Rateable Value proposed at £44.25m was progressively reduced to £25m. The majority of business rates are pass through costs, so most of the savings will flow back to TOCs through reduced charges.

7.1 Train numbers

As a result of the Covid-19 pandemic, the number of train services operated in every year of CP3 was significantly below the PR19 forecast. We agreed with passenger operators to perform volume reopeners at the Principal Change Date until the end of CP3. We are now measuring train paths against the assumptions used for the volume reopeners, rather than the PR19 forecast. A comparison of train paths billed against volume reopener assumptions is shown in Table 7. A freight volume reopener was also triggered under the Freight Access Terms at the end of 2023/24 due to lower volumes in that year.

EIL's total volumes in 2024/25 were 17,329 (FWT and spot bids), higher than the volume reopener assumptions. SETL's total volumes remain below the domestic underpin. The total volumes charged to SETL and DfT in the year were broadly in line with the volume reopener assumptions. Although remaining below the underpin level, SETL's services increased from December 2023, with 16 extra Springhead trains per day, Monday to Friday. These ran as spot services from December 2023 and were incorporated into the FWT from June 2024. Freight services ceased operating on HS1 in July 2024 due to commercial reasons.

	Actual	VR	Var	Var %	PR19	Var	Var %
EIL	16,837	16,513	324	2.0%	17,700	-863	-4.9%
SETL + underpin ¹	52,860	52,860	0	0%	55,400	-2,540	-4.6%
Freight	59	200	-141	-71%	454	-395	-87%
Total FWT trains	69,756	69,573	183	0.3%	73,554	-3,798	-5.2%
EIL spot bids ²	492	0	492		0	492	
SETL spot bids	1,149	0	1,149		0	1,149	
Total spot bids	1,641	0	1,641		0	1,641	
Total trains	71,397	69,573	1,824	2.6%	73,554	-2,157	-2.9%

Table 7: Analysis of train paths billed v volume reopener

¹ SETL paths booked in FWT for 2024/25 = 47,493

² EIL is billed full OMRC on spot bids up to the volume reopener assumption

7.2 Route OMRC revenue

The Operations, Maintenance and Renewals Charge (OMRC) for CP3 was initially set in 2020 through the PRI9 process. The charges were set at a level which it was intended would enable London St. Pancras Highspeed to fully recover operating and maintenance costs over the life of the control period. With limited exceptions, the expectation would ordinarily be that charges remain fixed until 31 March 2025, subject to RPI indexation. The charges (excluding pass through costs, OMRCC) are rebased in line with the annual increase in RPI. For reference, the February 2024 RPI rate was 381.0 and the base RPI rate (February 2018) was 278.1. Please note that all £ values shown below are in nominal terms and there may be rounding differences.

As noted above, the Covid-19 pandemic led to considerably reduced train operations compared with the PR19 forecast. The HS1 Passenger Access Terms (PAT) require OMRC to be reopened where the forecast volume varies by more than ±4% from the relevant baseline. The reopener sets revised OMRCA2 and OMRCB charges, based on updated expected train minutes, to ensure that London St. Pancras Highspeed continues to recover enough in charges to cover costs.

London St. Pancras Highspeed agreed with passenger train operators to perform annual volume reopeners until the end of CP3. During the third reopener (December 2022), London St. Pancras Highspeed identified a shortfall of £3m in February 2018 prices (circa £3.9m in February 2023 prices) in OMRCA2 and OMRCB because the percentage split of domestic services in the model did not align with the split of services set in the Domestic Underpinning Agreement. This overstated the expected total domestic minutes used to set the volume reopener charges. OMRCA2 and OMRCB charges increased by 2-4% in real terms in the third reopener to recover this shortfall over the remainder of CP3. TOCs have paid these rates but have challenged London St. Pancras Highspeed's ability to make this adjustment and continue to reserve their rights in respect of the invoices they are paying.

The December 2024 volume reopener (the final volume reopener for CP3 covering the remaining four periods to end March 2025) was consulted on and was finalised in early March 2025.

In addition to funding operations and maintenance, an element of OMRC is designed to build up a fund for future renewals and this money is transferred into escrow. Both TOCs were offered a temporary escrow holiday from P1 2020/21 to P3 2021/22 inclusive and this offer was accepted by EIL. EIL continued to repay the deferred amounts until the end of CP3.

OMRCC rates are reset every year in order to recover pass through costs and a wash-up is performed on an annual basis.

London St. Pancras Highspeed currently has Framework Track Access Agreements (FTAAs) in place with EIL and SETL. The FTAAs have agreed chargeable journey times for each service group and a rate per minute/per km per train. These parameters, together with train numbers, drive the revenue.

Income in the first three years of CP3 was much lower than the CP3 budget due to the reduced FWTs from both EIL and SETL, unrecovered OMRCA1 on trains not run and the shortfall identified during the third reopener noted above (£3m in February 2018 prices). However, the volume reopener model is built to ensure full recovery of OMRCA2 and OMRCB over the course of the entire control period and this, as well as recovery of the shortfall, means that OMRC income from passenger operators in 2024/25 is above CP3 budget levels.

O&M revenue of £111.5m is £12.1m above the CP3 forecast. This is due to:

- £8.0m higher recovery on EIL following the volume reopeners;
- £4.9m higher recovery on SETL following the volume reopeners;
- £0.1m higher recovery on freight; and
- £0.8m less from lower pass-through income.

Further breakdown and analysis of revenue appears in Statements 1 and 2 in Appendix A4.

7.3 Route OMRC expenditure

Overall OMRC expenditure (Statements 1 and 3 in Appendix A4) was £99.2m, £1.4m below the CP3 forecast, or £1.8m below forecast if we remove £0.4m of ERTMS early works. This is made up of a number of cost lines as described below.

7.3.1. Controlled track costs

The majority of spend in this category is for work carried out by NR(HS) under the Operator Agreement. This is a fixed price contract uplifted by RPI + 1.1% each fiscal year.

Controlled track costs were $\pounds(0.2)$ m above the CP3 forecast. The variance within this is:

- Subcontract costs showed a saving of £0.6m versus the CP3 forecast, split between BTP and National Grid Connections (NGC) costs.
- Staff costs have been reduced from last year and are aligned with the CP3 forecast.

- Technical consultant costs are $\pounds(0.8)$ m higher than CP3 forecast partly due to the additional legal costs arising from PR24 process and legal costs for the proposed PAT changes.
- Other costs are £0.2m below CP3 forecast including small savings across numerous areas such as training, banking charges, corporate memberships.
- R&D spend is £0.8m above CP3 forecast, representing the catch up of underspends in earlier years in CP3.
- NR(HS) spend is £0.6m below budget.

It should be noted that the CP3 forecast was set before the pandemic. The assumptions that had been used were immediately out of date and the steady state plan was no longer appropriate. London St. Pancras Highspeed has borne the impact of cost rises within the control period to manage the concession. The detailed review of London St. Pancras Highspeed staffing levels last year has reduced staff costs back to CP3 planned levels.

7.3.2. Pass through costs

Pass through costs are charged to TOCs during the year based on the items agreed as part of PRI9. At the end of each year, a wash-up adjustment is carried out to ensure that revenue collected matches the spend for these items. Overall, the pass-through cost is $\pounds(0.7)$ m higher than the CP3 forecast. There is a $\pounds(1.2)$ m overspend on non-traction power due to increased electricity cost on world markets. Insurance charges and UKPNS fees are each $\pounds0.1$ m below the CP3 forecast. Due to the backdated reduction in business rates, we are now showing a $\pounds0.3$ m saving versus the CP3 forecast (see Section 7.8.1).

7.3.3. Freight costs

These are costs which are either specific to the operation of freight services or the costs of maintaining freight-specific infrastructure. Although a lower number of freight services are run, London St. Pancras Highspeed is still obliged under the Concession Agreement to maintain the assets and therefore incur costs, mainly for work carried out by NR(HS) or NRIL.

7.4 Station charges

The Long-Term Charge (LTC) was set for each station for CP3 to enable London St. Pancras Highspeed to fully recover the costs of funding station renewals. This was done through a process similar to the PR19 process in consultation with industry stakeholders and the DfT, which had regulatory oversight of HS1 stations at the time. Within a control period, each LTC is subject to an annual RPI-linked adjustment, but the expectation would ordinarily be that charges remain fixed until 31 March 2025 (with limited exceptions).

Excluding recovery of amounts deferred through the escrow holiday (see Section 7.2), LTC income in 2024/25 is as follows:

- St. Pancras International £7.9m
- Stratford International £1.6m
- Ebbsfleet International £1.7m
- Ashford International £0.9m

Operations and maintenance costs for stations assets are called Qualifying Expenditure (Qx). Qx estimates are produced on an annual basis in accordance with the Station Access Conditions between London St. Pancras Highspeed and the train operators. Qx is not regulated. Total Qx spend across the four stations is £38.0m and is £3.9m below the Best Estimate level. This is subject to final wash-up. Statement 7 in Appendix A5 provides further detail.

7.5 Renewals

£17.8m was withdrawn from escrow in the year.

£13.6m was for route renewals charged to route escrow. This compares to withdrawals in the previous year of £13.0m.

Across the four HS1 stations, the renewals charged to the respective escrow accounts in the year were:

- St. Pancras International £2.6m
- Stratford International £0.8m
- Ebbsfleet International £0.8m
- Ashford International £0.0m

This is £4.2m in total compared to withdrawals in the previous year of £2.8m.

Section 5 provides commentary on the delivery of route and station renewals.

7.6 Escrow accounts

Part of the OMRC and the LTC paid by TOCs is designed to fund future renewals of the HS1 railway and stations. The funds collected are paid into separate ring-fenced bank accounts (one for route and one for each of the four stations) each quarter.

The route escrow balance as at end year was £196.7m. Funds invested for the route were £0m, with all investments and interest returning to the current account by the end of the control period as required by the Concession Agreement. Statement 4 in Appendix A4 provides further detail on the balances.

The total escrow balance across the four separate station escrow accounts as at end year was £90.0m. Funds invested for the stations were £0m as required by the Concession Agreement. Statement 8 in Appendix A5 provides further detail on the balances.

The interest earned over CP3 was restricted due to the underlying constraints in the Concession Agreement. The two possible enhancements to help narrow the gap between interest earned and inflation are:

• Appendix 4 of Schedule 10 of the Concession Agreement has historically limited the ability of banks to take deposits since banks have found the terms too prescriptive and lacking flexibility. We are currently working with the DfT to agree the terms of specific Appendix 4 letters (but not an amendment to the schedule itself).

• Expanding the scope of Authorised Investments to include money market funds and reverse repurchase agreements to enable us to diversify and increase returns while maintaining security over the balances.

7.7 Specified Upgrades

The Concession Agreement defines certain expenditure as Specified Upgrades or upgrades to the route infrastructure. Specified Upgrades and upgrades may be financed either through a grant from the Government, an increase in the Investment Recovery Charge known as an Additional Investment Recovery Charge (AIRC) or a combination thereof. Statement 5 of Appendix A4 sets out the expenditure on upgrades.

Early design and planning works for ERTMS are currently being undertaken and should be concluded by June 2025 (see Section 6). The project cost is being recovered via an Additional IRC (AIRC) with a 12-month recovery period.

7.8 Management of efficiencies

7.8.1. London St. Pancras Highspeed efficiencies

As part of PRI9, the ORR determined an efficient level of cost for the operations, maintenance and renewal of the route infrastructure. We are continuing to explore all opportunities to improve cost efficiency against this baseline. For renewals, the project costs in the PRI9 determination were deemed to be the efficient cost of delivery. We review the final cost of each project once completed against the original CP3 determination cost and record the reasons for any differences (see Section 5.3).

The largest element of our cost is the agreements with NR(HS) for route and stations. We have worked collaboratively with NR(HS) to improve efficiency and this has been demonstrated in the PR24 5YAMS. As noted in previous AMASs, we agreed a methodology for NR(HS) to report its efficiency against the CP3 route determination and this is set out in the next section.

Although there was NR(HS) outperformance of £1.6m in 2022/23 (which was shared with the TOCs), responding to the Thames Tunnel incident in December 2023 resulted in no outperformance in 2023/24.

Electricity: Our Energy Purchasing Strategy (EPS) aims to deliver 100% renewable electricity by April 2030. We will progressively introduce Power Purchase Agreement (PPA) volume, aligned with a targeted reduction in total consumption by 2030 and ongoing efficiency in purchasing by minimising unit costs. In the first year of CP4, we will review our energy procurement strategy and timelines to assess if this target remains achievable. Our interim target to deliver the majority of baseload (up to 80%) through PPAs was not achieved by April 2025 due to market conditions, however, we are closely monitoring the market and continue to engage with our customers on this matter. The efficiency objective is delivered through the hedging approach adopted and agreed with the TOCs. We have negotiated a new supply contract with SSE that commenced in April 2025 and delivers cheaper electricity "shaping" than the outgoing contract. We have also contracted for separate electricity hedging advice through Mitie, which has commenced and is being used to hedge future seasons electricity. We have had significant success in drawing up a Risk Management Policy and Procedures (RMPP) document with Mitie that clearly sets out

agreed policies and limits for the hedging strategy. This has been discussed and agreed with TOCs over several months and represents a historic change in the clarity, communication and agreement of electricity risk management between London St. Pancras Highspeed and bill payers. We are also actively investigating the possibility of short term PPAs (3 to 5 years) to provide stable, renewable electricity while the feasibility of a Private Wire arrangement is investigated.

Business rates: Following circa two years of work with our rating consultants, the Valuation Office Agency (VOA) and TOCs, we have recently had confirmation that we have been successful in achieving the rates reduction we had previously reported on. As previously disclosed, through challenges to the VOA we reduced our assessment from £44.25m in October 2022 to £27.5m by the start of the ratings period. This was then further reduced to £25m, with the reduction backdated to the start of the ratings period. As the majority of business rates are pass though, this credit will mostly flow back to the operators.

7.8.2. Costs under the Operator Agreement with NR(HS)

In the first year of CP3, NR(HS) introduced a new methodology, known as the fishbone analysis, to demonstrate how committed efficiencies are categorised and variances explained when comparing to its control period determination, based on the process used by NRIL. The fishbone diagram indicates the movement in costs from the exit point of CP2 through to the post-efficient position.

NR(HS) does not wish to share the fishbone analysis with London St. Pancras Highspeed for commercial sensitivity reasons. Similarly to the past four years, NR(HS) has agreed with London St. Pancras Highspeed and the ORR that it will share its CP3 year 5 efficiencies report including the fishbone analysis directly with the ORR, separate to the London St. Pancras Highspeed AMAS, in late May.

A1 CP3 COMMITMENTS

The PRI9 ORR Final Determination included 28 route asset management recommendations and the DfT Final Decision included 11 station asset management recommendations. The table below shows the recommendations which remained open at the start of 2024/25.

ORR/DfT ref	ORR/DfT recommendation	Action by date	2024/25 progress update	Comment on delivery
Route				
	Undertake a follow up review		NR(HS) has held ISO55001 certification for route assets since 2018. Following an audit in 2024 stations and depot assets have been added to the NR(HS) certification.	
2	of progress towards a goal of gaining ISO55001 accreditation	By March 2023	London St. Pancras Highspeed has successfully completed the Stage 1 and Stage 2 audits and has been issued with ISO55001 certification for the route and four stations.	Closed
			In the Q1 2024/25 reporting meeting we agreed that this commitment can now be closed.	
	Future 5YAMS to document	In advance	London St. Pancras Highspeed provided ORR with the Assurance Framework, Health Safety and Assurance Strategy, and Health Safety and Assurance Audit Standard in October 2021. Assurance Plans are in place for route and stations, which are reviewed quarterly.	
3	and demonstrate the assurance activities London St. Pancras Highspeed has undertaken on NR(HS)	of the CP4 5YAMS submission	Assurance of the asset management approach and proposed renewals work bank was one of the key workstreams identified for PR24. The first draft of the activities and themes that define this workstream was presented at the PR24 Steering Group in January 2022, the outcomes of the assurance were presented at the 11 December 2023 stakeholder workshop. Further details of assurance activities have been provided in the PR24 submission.	Closed

			In the Q1 2024/25 ORR reporting meeting we agreed that this commitment can now be closed.	
			NR(HS) route and stations were audited on asset information in March 2023. The audit found no non-conformances and asset condition was recorded for 99.5% of assets.	
11	London St. Pancras Highspeed to set out the minimum asset data requirements and then report on data quality annually.	At next revision or no later than 31 December 2020	Significant progress has been made during 2024/25 to move to a new Enterprise Asset Management System, EAMS2.0. The new system will provide NR(HS) with an improved capability and structure through which to manage the assets and the opportunity to transform the maturity of asset information.	
			The core asset data is defined in existing maintenance standards. The asset hierarchy is defined in the Asset Data Dictionaries for route and stations.	Closed
			NR(HS) and AMX have carried out an in-depth review of current asset registers, maintenance activity and associated processes to understand the discipline specific requirements.	
			Following the EAMS2.0 go live date gaps in the data will be targeted for population. This process will be simplified in EAMS2.0 as it includes a mobile platform which will make the addition of data more efficient.	
			This commitment was postponed to focus on Covid-19 response actions.	
12	London St. Pancras Highspeed to review operations and maintenance risks ownership with funders.	Plan & programme to be developed and agreed by 31 March 2020	London St. Pancras Highspeed took a stocktake on the treatment of risk with NR(HS) and areas to explore with funders to better manage risk in CP4. This paper was shared with the ORR and TOCs. We then held an initial meeting with TOCs on the description of contract risks and possible improvements in September 2023. This paper has been shared with the ORR. From this work, and as part of the PR24 process, London St. Pancras Highspeed and NR(HS) have identified areas of cost risk that can be removed as other protections are in place. The CP4 contract risk proposal was presented to all	Closed

that potential changes to the allocation of performance risk could drive better outcomes. It was agreed that further exploration would be considered as part of the ORR-led discussions on risk and uncertainty. The ORR's Draft Determination noted its views on the O&M risk for NR(HS), which NR(HS) is considering.

We agreed at the Q2 2024/25 ORR reporting meeting that this commitment can now be closed.

A2 THAMES TUNNEL KENT PORTAL IMPROVEMENTS

Since the flooding of the Thames Tunnel in December 2023, high volumes of water have continued to flow through the track drainage in the Swanscombe area and into the tunnel's Kent portal sump. It has therefore been necessary to supplement the original pump system with additional capacity to manage the higher inflows and provide suitable redundancy in the system. NR(HS) has purchased and installed a new portable pumping system to replace the system that had been rented since the incident. The new system was commissioned in November 2024 and, as well as increasing pump capacity and reliability, includes additional features to further improve performance and reliability. These include a more advanced water level control system which spreads the pumping load across both pumps, the ability to remotely check system status and health, and remote monitoring capability on the discharge flow to track volumes of water pumped.

In addition to the increased pumping capacity on site, further improvements have been made to the infrastructure and the supporting processes. These have mainly been driven by the findings of the independent investigation into the cause of the flooding incident (which concluded in April 2024) and the peer review of this investigation by a second independent consultant at the request of London St. Pancras Highspeed. All suggested actions and recommendations from both sources, along with recommendations from investigations into the operational performance of NR(HS) during and following the incident, have been collated and tracked as one holistic workstream. Key areas identified for improvement have been addressed by NR(HS) through the following actions:

- System Monitoring Capability: The original pump installation had no provision for flow monitoring on the inflows or discharge lines into or out of the sump and no ability to record and log data over time, making it hard to identify changes to system characteristics. Real time sump water level monitoring has now been implemented along with flow rate monitoring on the inflow and discharge lines of the pumping system. Analysing this data allows for a greater understanding of system performance and provides early warning in the event of unusual system behaviour.
- Alarm System: The infrastructure investigation raised several points in relation to the operation and management of the EMMIS alarm system associated with the pumping assets including both the design and configuration of the asset and the NR(HS) processes and procedures for managing alarms once they have been generated. The existing alarm systems have now been supplemented through the specification of the newly installed pumping and RCM equipment, for example, the sump water level monitoring includes an additional high-level alarm in the event that there is a failure of the EMMIS system and an alarm has been set on the inflow rate into the sump to alert to particularly high inflows. In terms of the management of alarms, a list of open alarms is now sent to the NR(HS) maintenance team daily to ensure any long-standing alarms are reviewed and managed.
- Configuration of existing pump system: Points raised about the design and configuration of the original pumping assets included pump capacity, discharge pipe bracing, position of air release valves, pump pedestal fixings and Non-Return Valve (NRV) type. These will be addressed through the longer term renewal and upgrade of the pumping system. The exception to this is the NRVs which have been replaced with soft-close variants to reduce the 'slam effect' experienced when the pumps cut out. The slam effect was subjecting the pumps and pipework to high impact forces and vibration which can result in a system failure.

Further to the actions taken to date to manage the risk presented by the changes in water volumes in the Swanscombe area, a scope of works has now been agreed with a specialist contractor to undertake a multidisciplinary review of the existing system capabilities in relation to current and projected future flow rates. Based on the findings, the contractor will deliver costed options and design specifications for system upgrades to meet existing and future demands. The contract will commence in early CP4 and will include technical assessment of local hydrology and climate change resilience, the operation and effectiveness of the existing Swanscombe Marsh drainage systems, the performance of the Swanscombe pump station, and, foremost, the capability of the Thames Tunnel pumping systems to manage changes in inflow resiliently.

A3 RESEARCH AND DEVELOPMENT PROJECTS

The table below shows all R&D projects in progress in 2024/25. Note that two E&P projects are funded by NR(HS).

Discipline	Project	Status
E&P (funded by NR(HS))	Infrastructure Monitoring using MPV (Cordel)	A close-out meeting and lessons learnt session was held with Cordel to review the processed data from the five recording runs. The data quality is still not sufficient for our use, as discrepancies between their data and our manual measurements are too significant. Cordel has committed to conduct further analysis to resolve this issue, but ultimately their equipment does not provide the accuracy we require for OLE monitoring on the HS1 network. The post-trial review is currently being finalised by the Professional Head (PH). An alternative data collection system offered by Fugro is already going through procurement and will come to an R&D Steering Group for approval early in CP4. The Fugro equipment has already been approved for use on NRIL infrastructure and a trial can be provided at speed to prove their technology works on the HS1 system.
E&P (funded by NR(HS))	OLE Monitoring Improvement (Hitachi)	After almost two years of delays, negotiations for this trial were terminated during P11. The delay ultimately meant this trial was no longer viable. NR(HS) has continued to look at trialling similar technologies and has revisited a supplier that was originally discounted earlier in CP3 due to incompatibility between their technology and the SETL fleet. Due to recent CCTV upgrades, the supplier is now able to offer a trial for the OLE monitoring and can provide a similar outcome as Hitachi, for a much lower price. NR(HS) will look to progress this trial early in CP4.
S&T	Fibre Optic Acoustic Sensing (FOAS) on Switches and Crossings (Hitachi)	The end of trial workshop and a lessons learnt session has been held. The post-trial review is with the Head of Innovation for sign-off. A decision will then be made on next steps based on the recommendations.
S&T	Remote Condition Monitoring (Vossloh)	The end of trial workshop and a lessons learnt session has been held. The post-trial review is with the Head of Innovation for sign-off. A decision will then be made on next steps based on the recommendations although the PH has already been working with the supplier to start to roll out this technology to other sites under their BAU contract.

Track	Lateral stability in High Speed Track (Hot Weather)	The final report was received in P13 and has been approved by the PH who is drafting the post research report. The report will go to the Head of Innovation for sign-off and any recommendations (e.g. changes to the standard) will then be implemented by the PH.
Track	In Service Monitoring – phase 2/3 (MoniRail)	This technology is currently being used on an extended 12 month trial. The track team has started using this data but only on an ad hoc basis when the TRC fails. The PH has reviewed historic data from the TRC and has not observed any significant difference between the two data sources. A meeting is being set up with EIL to discuss the future use of this technology.
Planning	Enterprise System Modelling (Hexagon/Aerogility)	The post project review has been signed off by the Head of Innovation and recommendations for implementation will be considered and agreed in P1.
Civils	Use of Drone Technology for inspections (Railscape/RUAS)	The post-trial review is with the Head of Innovation for sign-off. The decision for BAU implementation is linked to the second drones trial below.
Civils	Use of Drone Technology for vegetation management (Railscape/RUAS)	The post-trial review is with the Head of Innovation for sign-off. The PH is keen to get this into BAU as soon as possible; however, funding will need to be identified and a business case will need to be taken to the NR(HS) Change Board for a decision. Consideration needs to be given to whether an NR(HS) drones standard will be required, or the NRIL standard can be adopted and amended for NR(HS) purposes.
Station	OpenSpace	Negotiations between London St. Pancras Highspeed and OpenSpace to use the system for another year were unsuccessful. The end of trial workshop and lessons learnt session was held in P13 and both a post- trial review and an optioneering paper for other ways to obtain this capability have been drafted and will be presented to the Head of Innovation and the Operations Director for a decision on next steps.
Planning	Digital Planning Tool	This trial has now ended; the end of trial workshop was held in Pl2 and the lessons learnt session in Pl3. The post-trial review is being drafted and will be submitted to the Head of Innovation for approval and a decision on next steps.
Civils	Use of Drones for Major Inspections (Arcadis)	All investigatory works have been completed and the final report from Arcadis is awaited. This will detail a proposal for the full trial including costs, risks and benefits.

E&P	OLE Monitoring (Transmission Dynamics)	Eurostar to provide technical information and the engineering change to enable the supplier to plan the fitting. As soon as the equipment is fitted, the 12-month trial will commence.
Track	CEMITAI	The SETL 395s have now been fitted with the CEMIT CDCs and data has started to flow through. Eurostar trains to be fitted once the NDA has been signed. Periodic review meetings have been scheduled, critical success factors for NR(HS) agreed and an NDA will be signed to enable document sharing.
R&D Portfolio	CP4 Challenge Statement refresh	This work has been completed with the outputs being presented at the CP4 R&D Launch Event on 29 April 2025.
Track	UGMS refresh	The UGMS unit is currently with Balfour Beatty for review, the outputs of this review are expected imminently. This UGMS refresh will shape the future of the overall Automated Inspection Vehicle initiative for the Track discipline.
E&P	OLE Contact Wire Research Project	The contract has been awarded to the University of Birmingham after three universities expressed an interest in this work. The contract is in the final stages of being signed and the project will begin imminently.
Operations	Dynamic Operational Modelling	This project will develop a base dynamic model for the HSI network using the digital twin BRaVE, developed by the University of Birmingham. The unique nature of the modelling permits manipulation of the assets and train capabilities to allow new scenarios to be explored to see what level of benefits and ultimately user cases could exist if the scenarios were implemented. The initiative is currently running to schedule with the model on track for completion by the deadline.

A4 ROUTE FINANCIAL REPORTING

Collection and Application of OMRC payments

- All values in nominal £m
- As at Period 13 2024/25
- Statement 1: Analysis of O&M financial performance
- Statement 2: Analysis of O&M income
- Statement 3: Analysis of O&M costs
- Statement 4: Analysis of the route escrow account
- Statement 5: Upgrades
- Statement 6: Net debt

STATEMENT 1: ANALYSIS OF O&M FINANCIAL PERFORMANCE

	Actuals	СРЗ	Variance Fav/(Adverse)
Income			
Operations and Maintenance	86.5	73.6	13.0
Pass through	25.0	25.8	-0.9
Total O&M income	111.5	99.4	12.1
Cost			
	54.3	51 9	0.6
Subcontract	J4.5 4.6	5.2	0.0
Internal	4.0	11 5	-1.3
Sub total: Controlled costs	71.8	71.5	-0.2
Pass through costs	26.5	25.8	-0.7
Freight	0.4	0.4	0.0
Upgrades (Note 1)	0.4	0.0	-0.4
Total O&M Costs	99.2	97.8	-1.4
Net Performance Regime Cost	0.0	0.0	0.0
Net Position Net income / (spend)	12.4	1.6	10.8

Note 1: This is the cost of the ERTMS early works Specified Upgrade. Costs are recovered via an Additional IRC.

STATEMENT 2: ANALYSIS OF O&M INCOME

		Ac	tuals			CF	23			Favo	Var ourable	iance e / (Advo	erse)
	EIL	SET	Freight	Total	EIL	SET	Freight	Total		EIL	SET	Freight	Total
Operations and Maintenance	33.9	52.3	0.3	86.5	25.9	47.4	0.2	73.6		8.0	4.9	0.1	13.0
Pass through	6.9	18.0	0.0	25.0	 7.5	18.3	0.0	25.8	_	-0.6	-0.2	0.0	-0.9
Total O&M income	40.8	70.3	0.3	111.5	33.5	65.7	0.2	99.4		7.4	4.6	0.1	12.1

Higher O&M income in 2024/25 due to Volume Reopener model assumptions driving Years 1 – 3 under-recoveries into last two years of the control period.

STATEMENT 3: ANALYSIS OF O&M COSTS

			Variance
	Actuals	CP3	Fav/(Adverse)
NR(HS)	54.3	54.9	0.6
ВТР	1.1	1.4	0.3
NGC Connections fees	0.4	0.7	0.2
NRIL costs	2.1	2.1	0.0
GSMR	0.4	0.4	0.0
ORR regulatory and Safety	0.6	0.6	-0.0
Total Sub-contract	4.6	5.2	0.5
Staff Costs	6.2	6.2	0.1
Technical Support/Consultancy	1.8	1.0	-0.8
Office running costs	1.6	1.7	0.1
Other Costs	1.8	2.0	0.2
R&D	1.4	0.5	-0.8
Total Internal	12.8	11.5	-1.3
Total Controlled Track Costs	71.8	71.5	-0.2
Energy Projects	0.1	0.0	-0.1
Insurance	4.0	4.1	0.1
Power non EC4T	3.6	2.4	-1.2
Rates	11.2	11.6	0.4
UKPN Fees and Renewals	7.7	7.7	0.1
Total pass-through	26.5	25.8	-0.7
NR(HS)	0.1	0.1	0.0
NRIL costs	0.2	0.2	0.0
London St. Pancras Highspeed			
costs	0.1	0.1	0.0
Total Freight	0.4	0.4	0.0
Upgrades (Note 1)	0.4	0.0	-0.4
Total OMRC	99.2	97.8	-1.4
Performance regime net cost / (income)			

Note 1: This is the cost of the ERTMS early works Specified Upgrade. Costs are recovered via an Additional IRC.

Statement 4: Analysis of the Escrow Account Route			
A) Reconciliation of movements in period to 31 March 2025	Actual	CP3	Variance
Opening balance current account	73.98	126.35	
Opening balance investment	86.00		
Deposits Maturing	(106.00)		
Deposit Placed	20.00		
Total Escrow b/fwd	73.98	126.35	(52.37)
Transfer In	43.10	28.94	14.16
Interest	7.21	1.18	6.03
Total transfers in	50.31	30.12	20.19
Drawdowns	(13.59)	(17.39)	3.80
Service Charge	(0.00)		
Total drawdowns	(13.60)	(17.39)	3.80
Closing balances	196.69	139.08	(28.39)
Closing Investments	0.00		
Closing Balances	196.69	139.08	(28.39)

Statement 5: Upgrades

Actuals 24/25

i) Analysis of Specified Upgrades and other upgrades HS1 has carried out in respect of the Review Year

In £m nominal				Cumu	lative since 0	1/04/2020	
	Actual	CP3	Difference	Actual	CP3	Difference	Total CP3
Specified Upgrades - ERTMS	0.4	0.0	-0.4	0.4	0.0	-0.4	0.4
Other Upgrades	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Upgrades	0.4	0.0	-0.4	0.4	0.0	-0.4	0.4

ii) Analysis of Specified Upgrades and other upgrades HS1 intends, or is required, to carry out in respect of the Year following the Review Year

in £m nominal

				Cumulative since 01/04/2020				
	Actual	CP4	Difference	Actual	CP4	Difference	Total CP4	
Specified Upgrades - ERTMS	0.1	0.0	-0.1	0.1	0.0	-0.1	0.1	
Other Upgrades	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Upgrades	0.1	0.0	-0.1	0.1	0.0	-0.1	0.1	

Statement 6: Net Debt				
in £m				
	Actual	CP3	Difference	Total CP3
A) Reconciliaiton of net debt at 31 March 2025				
Opening Net Debt Income	0	0	0	0
Expenditure	0	0	0	0
Total Expenditure	0	0	0	0
Financing				
Total financing costs	0	0	0	0
ClosingNet Debt	0	0	0	0

The charging model assumed no debt. The charges are based on the principle that London St. Pancras Highspeed recovers its Operating & Maintenance costs in full over the life of the control period. Should significant and material variations occur, and it is agreed with the ORR that the additional costs should be logged, then it is anticipated that this page would be used to record the logged charges and any associated finance costs. To date there have been no significant and material events, and none are anticipated.

A5 STATIONS FINANCIAL REPORTING

All values in nominal £m

As at Period 13 2024/25

Statement 7: Analysis of Stations Qx

Statement 8: Escrow account summary

STATEMENT 7: ANALYSIS OF STATIONS Qx								
		As at P13, Financial Year 2024/25						
	Actual	Budget	Var	Var %				
St. Pancras	27.4	29.7	2.3	8%				
Stratford	4.4	4.7	0.3	6%				
Ebbsfleet	4.3	5.1	0.8	16%				
Ashford	1.9	2.4	0.5	20%				
Total Stations Qx	38.0	41.9	3.9	9%				
Statement 8: Escrow account summary

in Current Account £m

Actual period ending 31 March 2025

St Pancras	Account
Opening Balance	18.52
Receipts	10.08
Withdrawal	(2.61)
Interest	2.85
Service Charges	(0.00)
Deposits Matured	38.50
Deposit Placed	(10.00)
	0.00
Closing Balance	57.34
Investments	0.00
Closing Balance	57.34

Stratford	Account
Opening Balance	4.76
Receipts	1.75
Withdrawal	(0.78)
Interest	0.40
Service Charges	(0.00)
Deposits Matured	4.00
Deposit Placed	0.00
	0.00
Closing Balance	10.14
Investments	0.00
Closing Balance	10.14

Ebbsfleet	Account
Opening Balance	6.05
Receipts	2.23
Withdrawal	(0.79)
Interest	0.51
Service Charges	(0.00)
Deposits Matured	5.00
Deposit Placed	0.00
	0.00
Closing Balance	13.00
Investments	0.00
Closing Balance	13.00

Ashford	Account
Opening Balance	4.37
Receipts	1.33
Withdrawal	(0.02)
Interest	0.38
Service Charges	(0.00)
Deposits Matured	3.50
Deposit Placed	0.00
Closing Balance	9.56
Investments	0.00
Closing Balance	9.56

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